

## FINANCIAL TIMES

Tuesday October 22 1991

## CIVIL AVIATION

Engine trouble stalls Rolls-Royce

Page 21

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## World News

## Efta close to deal with EC over free trade zone

Negotiations to create a free trade zone between the EC and the European Free Trade Association were close to success last night, although Greece was insisting on further concessions over transit licences.

The EC Twelve and the seven-member EFTA narrowed their differences on the amount of extra aid Norway would make available, and the volume of "cohesion" aid and soft loans EFTA would provide for the EC's poorer members. Page 22

French ministers at bay

French prime minister Edith Cresson has forbidden members of her government to leave Paris without first receiving clearance. The security order comes after several violent demonstrations against government ministers by farmers who are angered by falling prices and possible EC agricultural policy reforms. Page 22

Missile talks to restart

The US and the Soviet Union have agreed to resume talks in Geneva early in January on President George Bush's proposals on ballistic missile defence. Page 7

Veteran Turk victorious

Suleyman Demirel was headed for victory in the general election, though a fragmented vote makes a coalition inevitable after eight years of rule by the Motherland party. Page 22

Major slams Commission

The row over the European Commission's intervention in environmental studies for seven construction projects in the UK flared again. John Major, Britain's prime minister, expressed "severe irritation" at the way the matter had been handled. Page 8

US Democrat to stand

Jerry Brown, former governor of California whose eccentricities earned him the nickname "Governor Moonbeam", has entered the race for the Democratic presidential nomination. Page 22

California fire rages

California firefighters were still struggling against a fire which has engulfed residential neighbourhoods close to the cities of Oakland and Berkeley, killing 10 people and destroying an estimated 600 homes. Page 6

Return of boat people

The repatriation from Hong Kong of all Vietnamese boat people moved a step closer after Vietnam agreed to accept the forced repatriation of about 250 boat people. Page 4

UK isolated on sanctions

Britain remained isolated on South Africa in spite of a more moderate Commonwealth stance on the lifting of sanctions. Page 4

Zaire crisis mounts

Troops of Zaire's elite presidential guard fired teargas and shots into the air to disperse thousands of pro-democracy demonstrators who had gathered to support Etienne Tshisekedi, the sacked opposition prime minister. Page 4

Madagascar protest off

Madagascar's opposition called off a warning strike launched four months ago to press President Didier Ratsiraka towards political reforms. Page 4

Korean talks resume

Korea's prime minister will travel to North Korea to resume a series of high-level talks aimed at improving relations and easing tensions across the heavily militarised Korean border. Page 4

Ole expels diplomats

Norway has expelled eight staff at the Soviet embassy for "activities incompatible with their diplomatic status", a term for spying. Page 4

## Lloyd's of London gets writ from 64 US members

Several hundred individuals and businesses in the Lloyd's of London insurance market were yesterday cited in a writ filed in New York alleging breaches of US securities and racketeering laws.

The allegations, by 64 of the insurance market's US members or Names - the individuals whose assets support underwriting - allege that Lloyd's and its agents broke the law by misrepresenting risks faced by potential investors in the market. Page 22

SIEMENS of Germany is to tighten its control over the ailing Nixdorf Computer company, which it rescued last year, by raising its stake from the present 78 per cent of the combined voting and preference stock to 100 per cent at a cost of nearly DM1.9bn (\$1.1bn). Page 23

LAFARGE Coppée, France's largest cement and construction materials group, plans to continue its expansion in Spain by taking a large stake in a Spanish cement producer. Page 23

TIME Warner, US media and entertainment giant, revealed a \$62m third quarter net loss, compared with a \$91m deficit a year ago. Page 23

SANWA International launched 10 authorised unit trusts in the UK, the first entry by a Japanese institution into the UK unit trust industry. Page 23

MANNESEMAN, German steel and engineering group, is to acquire a 51 per cent stake of the steel works of VDO Adolf Schindling, a Frankfurt-based manufacturer of instrumentation systems for cars and aircraft. Page 23

US government is considering cutting taxes for middle-income families as part of effort to stimulate economic growth. Page 7

GRAND Metropolitan, UK food, drinks and retailing group, has bought Greece's leading food producer, Kalyon Brothers, consolidating its presence in the Greek drinks market. Page 30

JAPAN's money supply expanded by a low 2.2 per cent last month, down from a revised 2.7 per cent growth in August, highlighting stock and bond market expectations of a cut in official interest rates this week. Page 4

NATIONAL Westminster Bank, wholly owned US subsidiary of Britain's National Westminster Bank, revealed a third-quarter loss of \$65.7m. Page 23

SKF, world's leading rolling bearings manufacturer, has announced a 95.2 per cent drop in profits (after financial items) for the first nine months of the year to SKr85m (\$13.8m) compared with SKr1.75bn for the same period of 1990. Page 23

CHASE Manhattan, New York bank that has been hard hit by the real-estate slump, released improved third-quarter results which suggest the bank's restructuring and cost-cutting policy is beginning to pay off. Page 24

From today, the FT-SE Eurotrack 100 index can be found in the panel immediately below this column. The index, launched a year ago, covers 100 leading continental European shares traded on the London Stock Exchange's international marketplace.

Fuller statistics on the FT-SE Eurotrack 100 can be found on the World Stock Markets page each day. Details of the FT 30-share Ordinary index, formerly carried in the panel below, can be found each day on the London Stock Market page.

## Germany is given grim warning on economy

By Quentin Peel in Bonn

GERMANY'S five leading economic institutes yesterday issued a grim warning of the consequences of failure to cut wage demands and government spending for the economy, and above all for the former East Germany.

They made an urgent appeal to the government, employers, trade unions and the Bundesbank to co-ordinate their wages, state spending and monetary policies to avoid worsening inflation and a sharp downturn in the economy.

The plea came in the latest autumn survey of the German economy issued by the five institutes, which reported that the collapse of the east German economy had bottomed out - but that there was no sign of any sustained recovery. A forecast for 12.5 per cent growth in the coming year was described as nothing more than "a technical correction of the collapse."

Initial government reaction to the survey completely ignored its overwhelmingly gloomy tone, and commended

instead its conclusion that the collapse of the eastern economy had bottomed out. The government spokesman said this proved that the "eastern upswing" had begun, in spite of repeated statements in the document to the contrary.

The institutes' report was particularly outspoken in warning of the consequences of a failure to restrain wage demands in both east and west, and government spending in the west.

The drive for wage equalisation in the east was

destroying the competitiveness of eastern industry faster than any productivity gains could be achieved through new investment, the economists said. The result was that the inflow of private investment was discouraged.

The two growth sectors in the east today - construction and retail trade - relied on public sector finance and the wages boom, respectively. That trend would continue unless incomes were restrained in all but those sectors of genuine labour shortage.

"In east Germany there will be no economy able to develop which is as efficient as that in west Germany, and which offers enough jobs," it said. "Many jobs in the new Bundesländer are not guaranteed in the long term, because they depend on the distribution of state finance." In addition, the continuing need for public funds to subsidise the eastern economy meant that the tax and social security burden on western workers would remain high and possibly rise further - fuelling

wage demands in the west. The state debt would continue to rise, restricting its own efficiency and burdening the capital market, further increasing the cost of capital. The institutes called for western employers and unions to keep their deals to a maximum of 4 per cent. That in turn, they suggested, would relieve the Bundesbank of real pressure to cut the money supply further.

Details, Page 3  
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## Israeli objections to PLO role may block peace talks

By Hugh Carnegie in Jerusalem and Max Rodenbeck in Cairo

ISRAEL'S prime minister warned yesterday that his government still had to scrutinise the list of Palestinian delegates to next week's Middle East peace conference to ensure they met Israeli terms for attending the talks.

Mr Yitzhak Shamir's statement came as Mr Yasser Arafat, chairman of the Palestine Liberation Organisation, stressed the significance of his role in the peace process and his closeness to the delegation representing the Palestinians at the talks.

Israel has said it will not accept any direct role for the PLO.

Mr James Baker, US secretary of state, has assured Mr Shamir that the Palestinian delegation, which is likely to be announced today in Jerusalem, would not contravene Israel's conditions that it should exclude members of the PLO and residents of Jerusalem.

Palestinian statements have exposed the extent to which the Israeli government has been forced to turn a blind eye to the PLO's thinly disguised presence. An irritated Mr Shamir said yesterday of the Palestinian delegation: "We will have to check the names and we will act accordingly."

Israel's officials indicated they did not expect a major upset, but stressed they would stick to their conditions. "The main test will be in the conference itself," an official close to Mr Shamir said. "If we find

ourselves sitting in front of people who are not acceptable to us, then we will leave."

In Cairo, Mr Arafat underlined his primary role in preparations for next week's conference. "Don't forget, I appointed (Faisal) Husseini to head the team of pre-conference negotiators," he told reporters, adding that he expected co-ordination between the PLO and the Palestinian delegation to be "excellent".

However, Mr Arafat was careful not to make any claims of responsibility for the nomination of Dr Haidar Abdul Shafi to head the Palestinian group in the talks with Israel.

But Dr Shafi himself told Israel Radio that the delegates would be representatives of the PLO. "In the sense that all Palestinians have allegiance to the PLO, so they are," he said.

Mr Shamir also reacted sharply to reports that the delegation would include up to six members who would not take part in the talks, but would act as advisers. They are expected to include figures Israel has objected to as negotiators, such as Mr Hussein.

"Nobody talked to us about this and we did not agree to this," Mr Shamir said. "This really takes us by surprise."

Mr Arafat yesterday met Egypt's president, Hosni Mubarak in an effort to heal Arab divisions before the conference. Mr Arafat, who has been shunned by Egypt since he backed Iraq during the Gulf crisis, won promises of Egyptian support for Palestinian demands at the conference, but failed to gain Egyptian assent for a full Arab mini-summit grouping the leaders of Israel's neighbours.

Instead, Syria, Lebanon, Jordan, Egypt and the PLO have agreed to send ministers to talks aimed at co-ordinating Arab strategy which are expected to be held tomorrow in Damascus. In a sign that welcoming the peace conference was not erasing Palestinian doubts over what they may gain, the PLO leader described guarantees given by the US as "not sufficient".

Syria and the PLO have agreed to try to persuade the other nations to stay out of multilateral talks on regional issues such as arms control, scheduled to start two weeks after the conference opening, until such time as Israel agrees to give up the occupied territories. Jordan said yesterday it was considering such a stance.

Meanwhile, Mr Shamir said he did not see any danger of his rightwing coalition collapsing because of headline opposition to the peace talks. One coalition faction, Tehiya, voted on Sunday to leave the government as soon as the conference opens.

However, two other extremist groups say they will only quit if negotiations get as far as the issue of territorial concessions by Israel. Even if they were to do so, Mr Shamir could continue in office with opposition Labour party support.

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Lebanese Hassan Hamka embraces his mother after being released with 14 of his compatriots from an Israeli prison at Tyre in south Lebanon

## US hostage Jesse Turner released after four years

By Hugh Carnegie in Jerusalem

AMERICAN hostage Jesse Turner was freed by kidnappers in Beirut last night, hours after Israel paved the way for a deal by releasing 15 Lebanese prisoners.

Mr Turner, who had been held since January 1987, was put in the custody of Syrian security officers and was being driven to Damascus to be handed over to US diplomats.

Mr Turner, now 44, was kidnapped on the campus of Beirut University with an American colleague, Mr Alan Stein, who is still being held.

With Mr Turner's release, kidnappers are now holding eight westerners, including four Americans.

Just before his release, the pro-Iranian kidnap group, the Islamic Jihad for the Liberation of Palestine, complained that Israeli bombing had held up steps to free him.

The bombing was part of a flare-up of fighting between Israeli forces and Hizbollah - the Iranian backed fundamentalist group - in southern Lebanon. Israeli jets bombed a Hizbollah base near the village of Jibsheet in retaliation for a bomb attack on Sunday in which three Israeli soldiers died.

Mr Yitzhak Shamir, Israel's prime minister, said the release was one in a series of steps agreed with Mr Javier Pérez de Cuéllar, UN secretary-general, aimed at securing the freedom of all remaining western hostages in Lebanon.

The complex hostage-swap arrangement includes Israel gaining confirmation of the fate of seven missing servicemen in return for the release of more than 300 Lebanese prisoners which it holds.

The UN has made considerable progress towards a settlement of the hostage problem since the release in August of Mr John McCarthy, a British journalist. His release was followed by the freeing of Mr Edward Tracy, an American, and Briton Mr Jackie Mann.

## Britain 'gives inadequate support to manufacturers'

By Michael Cassell, Business Correspondent, in London

SOME of Britain's most senior industrialists yesterday criticised its government and banks for failing to support manufacturing industry. They called for a national commitment to help sustain long-term investment in the country's manufacturing base.

They criticised the Department of Trade and Industry for failing to promote the interests of manufacturing and claimed the Treasury and Bank of England were handicapped by a combination of poor information, lack of first-hand understanding of the realities of manufacturing and an apparent mistrust of outsiders.

In a report prepared by the Confederation of British Industry, the business leaders said the UK government must be prepared to act as the "champion of industry" in the international arena. "We cannot afford for key exporting industries to lose orders because UK manufacturers in practice receive less support from their government

than major competitors," they added.

They also criticised the short-term attitude towards manufacturing among UK financial institutions. Steps to redress the "imbalance of power" between the banks and smaller manufacturing businesses were called for, as well as an improved climate of understanding between shareholding institutions and larger manufacturing companies.

The report, which is certain to reignite the political debate over Britain's comparatively weak manufacturing performance, claims only "a fundamental shift in attitudes" will allow the UK to compete successfully with other leading manufacturing nations.

Mr John Banham, CBI director-general, said that Britain's manufacturing sector had not been run down during the 1980s. After decades of decline, the UK's share of manufacturing exports was again rising. Even so, Britain's overall manufacturing performance still

lagged badly behind that of its main competitors.

He added: "Without a strong manufacturing base, there is not the slightest prospect that the UK will generate the wealth our politicians are competing so wildly to spend."

Mr Peter Lilley, trade and industry secretary, brushed aside the more critical passages of the report. He said he shared the CBI's support for manufacturing industry, whose future would depend on its ability to innovate and to provide quality products.

The CBI report did not exclude companies from criticism. It said that while many had achieved world-beating performances, the aggregate figures suggested there were too few of them. The average productivity of the top one-quarter of UK manufacturers was more than five times the average of the bottom quarter.

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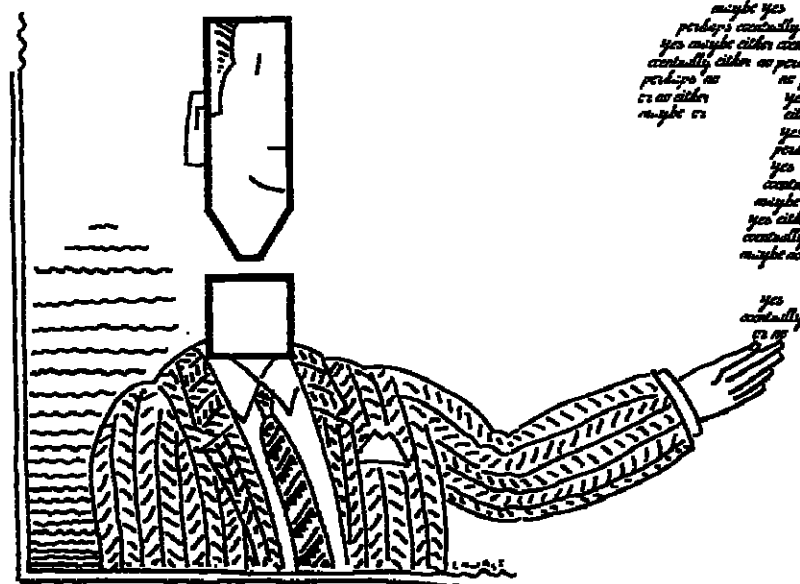
## Apple sets sights on market for notebook computers

John Sculley (left) chairman and chief executive of Apple, has high hopes that the US computer company's new "Macintosh PowerBook" notebook computers will become the market leader.

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## MARKETS

STERLING	DOLLAR	STOCK INDICES
New York lunchtime:	New York lunchtime:	FT-SE 100:
\$1.716	DM1.6823	2,575.7 (-25.4)
London:	FFFr.7695	FT-SE Eurotrack 100:
\$1.719 (1.725)	SPFr.4938	1,097.89 (-1.12)
DM2.905 (2.9125)	Y130.7	FT-A All-Share:
FFFr.915 (9.9325)	London:	1,242.48 (-0.8%)
SPFr.545 (same)	DM1.6905 (1.6885)	New York lunchtime:
Y224.75 (223.75)	FFFr.7675 (5.7575)	DJ Ind. Av.
E Index 30.4 (same)	SPFr.4805 (1.4755)	3,055.48 (-21.69)
GOLD	Y130.7 (129.75)	S&P Comp
New York: Comex Dec	\$ Index 64.8 (64.5)	395.47 (-3.03)
\$365.9 (364.4)	Tokyo close:130.6	Tokyo: Nikkei
London:	US lunchtime rates	25,016.81 (+121.99)
\$363.4 (360)	Fed Funds 5 1/2%	
N SEA OIL (Argus)	3-mo Treasury Bill:	
Brent 15-day Dec	yield: 5.177%	
\$22.55 (same)	Long Bond:	
Child price changes	100 1/2	
yesterday: Page 23	yield: 8.035%	



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## EUROPEAN NEWS

## EniChem in jobs deal with unions

By Robert Graham in Rome

THE tortuous process to restructure Italy's ailing chemical industry has cleared an important hurdle after a week-end accord between EniChem, the chemicals subsidiary of the state energy concern, Eni, and the unions.

The accord allows EniChem, the world's ninth biggest chemicals group, to go ahead with a 1.82bn (\$2.7bn) four-year business plan in limbo for almost six months. But the company has had to water down job losses and prolong the life of some plants, after pressure from unions and government worried about employment in the south, Sardinia and Sicily.

This seems to be the price for the government, always sensitive about state company job losses in the south, being willing to back the plan. Last week, chemical workers struck at EniChem plants and threatened continued industrial unrest if the company persisted with its original job-cut proposals.

EniChem already has 5,000 workers laid off and had planned a further 2,800 lay-offs out of the 44,000 work force. It has now accepted to retain an extra 450 workers and ensure that 3,000 of those laid off will go into early retirement. It has also agreed to delay closure of its acrylic fibres plant at Villacidro, Sardinia, and ensure that workers at the loss-making fertiliser plant at Crotone, Calabria, will find alternate employment. It will also seek means to sustain the fertiliser plant at Gela in Sicily.

These measures are timid compared to restructuring by EniChem's international competitors. But the union deal reflects EniChem's continued socio-economic role in the south, which the politicians are reluctant to alter. The plan aims to rationalise fertiliser capacity, emphasise core business by exploiting EniChem's petrochemicals plant, and move into products with higher added value. The union accord should help the search for a partner to exploit EniChem's polyethylene capacity.

## German 'wise men' see no rising star in east

THE COLLAPSE of the former East German economy has ended, but there are no signs of any sustained recovery yet, according to the five leading German economic institutes.

Their annual economic survey is extremely cautious throughout in its prognoses, especially on the east. It is sharply critical of a range of policies instituted by the federal government, the Treuhand agency responsible for privatisation, and the local authorities in the so-called "new Bundesländer".

At the same time, it recognises that many of the reasons for the collapse of the eastern economy in the year after unification have been inevitable and irresistible.

In the first place, the wise men of the institutes forecast a 10 per cent recovery in eastern economic output next year, but they stress repeatedly that this cannot be seen as the beginning of a sustained upswing.

"It is more like a technical recovery after the collapse, rather than anything more substantial," according to Dr Helner Flassbeck of the Berlin-based German Institute for Economic Research.

"Evidence of a broadly based, sus-

tained economic recovery, in whose wake would come rising demand for labour across the whole east German economy, is simply not yet to be found," the survey says. "The most recent slight reduction in unemployment cannot in any way be seen as a turning point for the development of activity, but as evidence of the massive application of labour market support measures."

Current unemployment, which stood at 1.03m in the east in September, is less than feared, but greatly understates the extent of adjustment over the past two years. Since the end of 1989, the number gainfully employed in the east has dropped by as much as 3.5m from almost 10m.

Those losses, from the complete closure of swathes of public sector jobs required under the old central plan - for example in trade and supply organisations - and from over-employment throughout productive industry, have been disguised by a variety of factors.

They include large numbers on short-time working, involved in job-creation (*Arbeitsbeschäftigung*) schemes, taking early retirement, and commuting to the west.

The economic collapse is over in former east Germany, writes Quentin Peel, but there is no sign yet of sustained recovery

The survey forecasts a further increase in unemployment to a peak of around 1.5m next summer, but still falling short of the most gloomy estimates of up to 4m-5m, which circulated at the time of unification.

The economists point to very erratic performance of the different sectors in the eastern economy, and warn that the easiest options for privatisation may have been exhausted. Thus privatisation of small shops, bars, restaurants and guest-houses (but not hotels) has been virtually completed, but is still modest in the industrial sector, and virtually non-existent in agriculture.

By the end of September, the Treuhand had privatised some 3,800 enter-

prises in the industrial and commercial fields, but 40 per cent of them were in services, construction, agriculture and forestry. It is still extremely difficult to assess the success or failure of the operation, the authors say.

Thus the Treuhand cites a figure of DM35bn (\$29.3bn) in promised investments under its sales contracts, with 720,000 jobs guaranteed. A further 2m are employed in enterprises still under Treuhand control which, the institutes fear, may prove more difficult to privatise, because the most attractive enterprises have been sold first.

If all the energy investment is taken out of the figure, it falls to DM55bn, or some DM60,000 per job, spread over several years, they say. If vehicle manufacture is taken out, the figure falls to DM60,000 per job. "In the light of the very high restructuring needs of businesses in east Germany, that seems far too little," the survey says.

The authors go on to criticise the slow sales of land, the slow privatisation of agriculture, and the excessive expectations for a rapid recovery in east German industry.

In manufacturing industry, the survey notes the relatively optimistic forecasts of the new eastern businesses. A majority surveyed by two of the institutes in recent weeks expect a significant recovery in the second half of the year. But the authors warn that most Treuhand-supervised businesses failed to achieve their turnover forecasts in the first half.

Three-quarters expect to be competitive within two years - and yet their answers betray a lack of awareness of the competitive pressures, including their failure to adapt their products for western markets. The outlook, the survey says, is particularly unfavourable for the electrical, machine engineering, textiles and chemical industries.

The survey reserves its grimmest warning for the effect of the pressure to raise eastern wages to a western level in a very short period.

This could undermine the competitiveness of large areas of eastern industry, leaving only islands of higher productivity created by western investment, and distorting the economic basis of the eastern economy for years to come.

## Finns take steps to cut cost of labour

By Enrique Tessieri in Helsinki

FINLAND'S employers and unions yesterday agreed a two-year deal which will cut labour costs by 6.9 per cent.

Under the agreement, to run from next January to October 31, 1993, the labour savings will take the form of a 3.3 per cent cut in employers' social security payments, a 3 per cent cut in employees' wages and holiday bonuses, and a 0.6 per cent cut in the amount paid annually as an age increment.

Finland is in severe recession and faces record unemployment and bankruptcies this year as well as high labour and production costs.

In order to lower the cost of living, the government yesterday promised anti-trust laws and relaxed import restrictions to enhance domestic competition, especially in agriculture; and more housing subsidies to bring down rent and property prices. A central bank official said the agreement should help cut inflation from around 4 per cent this year to 1 per cent in 1992.

## Serbs close ranks against EC constitutional plan

By Laura Silber in Belgrade

SERBIA'S president, Mr Slobodan Milosevic, is supported by opposition parties in the republic in rejecting the constitutional plan for Yugoslavia presented by the European Community in The Hague last week.

Montenegro, normally a close ally of Serbia, accepted the document because its population is mostly contained within its own borders and it did not thus fear the consequences of independence.

But Serbia ruled out the plan, which calls for an association of independent republics, because 2.5m Serbs live in neighbouring Croatia and Bosnia-Herzegovina.

"The proposal... takes into account the Slovenes and Croat aspirations for independence but leaves 2.5m Serbs who live outside Serbia's borders as a national minority in an independent Croatia and Bosnia-Herzegovina," said Mr Dragoljub Micunovic, leader of the centrist Democratic Party.

The proposal, which was loosely based on the same prin-

Spurious battles flared in Croatia yesterday despite a ceasefire. The rebel republic's radio said a "cataclysm" of fighting had damaged beyond recognition four tourist towns near Dubrovnik, Reuters reports.

Cold and rain tempered fighting on some fronts but the Yugoslav army and Croatian forces fought mortar and artillery duels in Nova Gradiska and Novska in central Croatia and around Vukovar in the northeast, Tanjug news agency said. Nine deaths were reported.

Principles as the EC charter, does not take into account the de facto changes in Croatia's borders caused by Serbian incursions since Slovenia and Croatia declared independence in June.

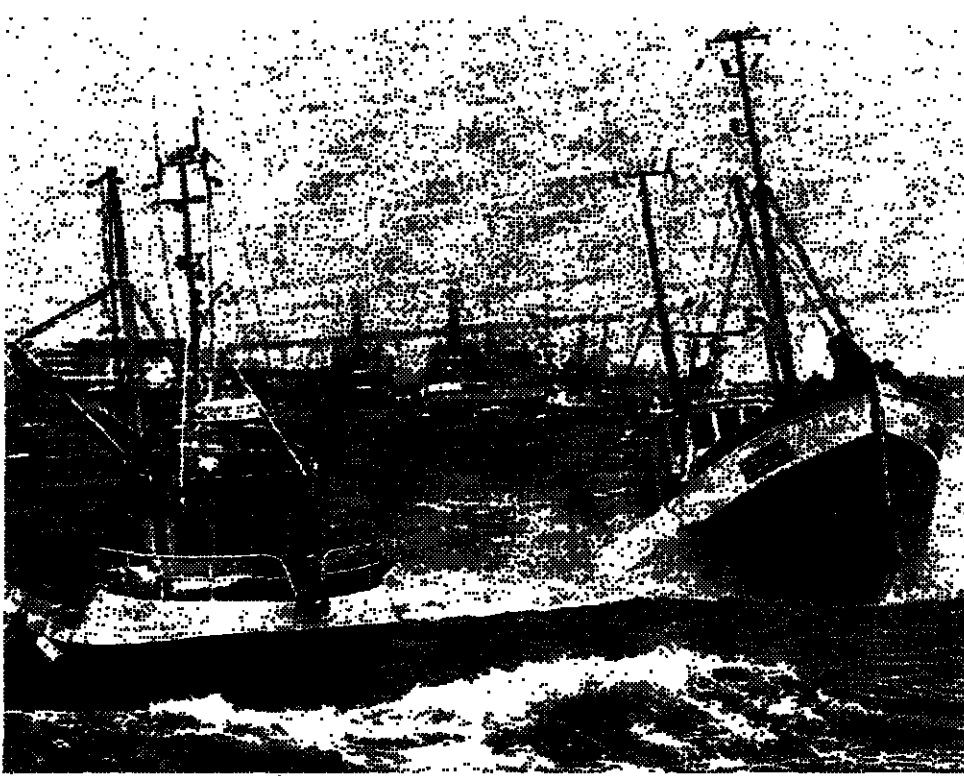
The Serbs, who believe they are fighting the continuation of the Second World War, refuse to contemplate an independent Croatia. Their armed uprising in Croatia over the past few months shows that this refusal

is not political posturing.

Serbia under Mr Milosevic's authoritarian rule appears ready to risk international isolation, because the alternative for him would have been political suicide. If he had accepted the document there could well have been violent protests among the Serbs in Bosnia and Croatia. This might even have led to his replacement by a still more nationalist and uncompromising leader. Among the most likely contenders would be Mr Vojislav Seselj, an ultra-rightwing leader who runs his own private army.

Mr Micunovic hopes the EC will now offer what moderate Serbs would see as a more feasible option - putting more emphasis on regions defined by ethnic groups, who would be given political autonomy but united by a common market.

He adds: "If Serbia were more democratic and represented by someone less demonised and hated than Milosevic, then the EC would probably have paid more attention to the Serbian argument."



SEVERAL hundred fishing boats blocked Norwegian ports for a second day yesterday in protest against any move to give European Community fishermen better access to their waters. AP reports from Luxembourg. Fishing quotas were one of the issues the 12 EC and

seven EFTA nations were trying to agree yesterday as they struggled to finalise an ambitious free trade accord. Some progress was reported, but the talks have dragged on for 16 months and yesterday's session was seen as a last-ditch bid to salvage them.





EUROPEAN NEWS

# Italy's unions in show of force over spending cuts

By Robert Graham in Rome

ITALIAN industry and public services will be paralysed today by a four-hour general strike called by the country's three main union federations in protest at public spending cuts proposed in next year's budget.

The strike is going ahead despite concerted efforts by the government to appease the unions and several changes already made to the budget presented on September 30. The government has halved the increase in prescription charges, one of the most unpopular items.

The strike is being exploited by the unions to demonstrate their muscle at a time when the government is under increasing pressure. They are involved in tough talks with government

## Italian plan for oil tax spin-off for third world

By Haig Simonian in Milan

A FIFTH of the new oil tax proposed by the European Commission should be diverted to energy projects in developing countries and eastern Europe, Mr Giorgio Ruffolo, the Italian environment minister, said yesterday at an international conference on energy technologies.

The controversial \$10-a-barrel oil levy, which is expected to raise around \$80bn a year from EC member states, will be used exclusively to fund international research into saving energy, under the Commission plans.

Under the Ruffolo scheme, presented at the opening session in Milan of an international conference on environmentally sound energy technologies, 80 per cent of the proceeds would go to finance transfers of energy-saving technology to developing countries. The move, he said, would also help curb increases in "greenhouse" gas emissions and bring the amount of aid distributed to the third world to internationally agreed levels.

## The Soviet Union's revamped parliament meets for the first time

### New faces appear in the old club

By Leyla Boulton in Moscow

"A GREAT club with a good buffet" was how Mr Vladimir Lukin, a Russian deputy, summed up the emaciated Soviet parliament which convened for the first time yesterday.

It was not just the linoleum in the smoking-room which had been replaced. The Supreme Soviet's very composition and role had changed. New faces, such as Mr Sergei Shakhrai, a leading reformer in the Russian parliament, showed up for the first time, while old-timers, such as Colonel Viktor Alksnis, co-chairman of the once-influential conservative Soyuz (Union) group, were reduced to the role of observers.



Gorbachev in parliament yesterday: the assembly has a mission to advance democracy, he said

lature until the shape of the future Soviet Union is decided, it is made up of two chambers chosen and controlled by the republics.

But it is already a casualty of the gradual break-up of the Soviet Union, since only seven of the 12 Soviet republics sent delegates. Azerbaijan and Moldova dispatched observers. The Ukraine, Georgia, and Armenia boycotted it altogether.

Mr Sergei Alexeev, chairman of the Constitutional Compliance Committee (the closest thing to a Soviet constitutional court), said the parliament's role would be to "stabilise" legislation and eliminate discrepancies between Soviet and republican legislation which previously paralysed the country.

## Court rejects probe appeal by Goodman

By Tim Coone in Dublin

THE DUBLIN High Court has rejected an appeal by lawyers for Goodman International, Europe's largest beef processor, to limit the scope of an inquiry into the Irish beef industry.

The private company, headed by Mr Larry Goodman, is the principal focus of an investigation by a parliamentary-appointed tribunal which was set up last June, following allegations of fraud and malpractice in the beef industry.

Lawyers acting for Mr Goodman and his company argued that the tribunal was unconstitutional and that allying the accusations in public would prejudice the possibility of a fair trial, should any formal charges be made. High Court Judge Declan Costello rejected the appeal saying that the powers of parliament to carry out investigations of public importance would be severely curtailed were he to rule in the company's favour.

## Plea to Kohl on office equipment factories

By Chris Parkes in Bonn

LAST-DITCH appeals from unions and local authorities yesterday raised slight hopes of a reprieve for workers at the Olympia and Triumph-Adler office equipment factories in Wilhelmshaven and Frankfurt.

The Baltic city of Wilhelmshaven asked Chancellor Helmut Kohl to intervene personally to save the AEG subsidiary, Olympia, which is due to cease trading at the end of the month, after years of losses.

Some 2,700 of the company's 4,000 workers are employed in and around the town.

The loss of these jobs, coupled with planned cuts in the German navy, would send local unemployment soaring from the present level of 15 per cent to 28 per cent and cause "chaos" in the region, officials of the port city have warned Mr Kohl.

recently turned down a proposal that the Wilhelmshaven local government should take a majority stake in its loss-making subsidiary.

In Frankfurt, Mr Giuseppe Giacobbe, managing director of Triumph-Adler, a subsidiary of Olivetti, suggested that new jobs could be created for about 200 of the 650 people who are threatened with redundancy there.

The powerful IG Metall union has been campaigning vigorously against the planned closure.

During more than three hours of talks with the union yesterday, Mr Giacobbe proposed replacing the existing factory with a smaller plant, which would assemble lap-top computers and supply plastic parts to other Olivetti subsidiaries.

Mr Heinz Bierbaum, a local union leader, said that the offer was "not an acceptable alternative". However, he added that the offer in itself "shows there is some movement".

The idea will be taken up again at a joint meeting of EC environment and industry ministers in December.

The Milan conference, part of a series of international meetings being held ahead of next year's World Environment Conference in Rio de Janeiro, has brought together around 250 international specialists in energy and environmental issues.

The Commission's proposed oil tax, which has been welcomed by some environment ministers, has had a mixed reception from other government departments.

The highlight of his speech was a warning to republics such as the Ukraine against trying to take over the Soviet armed forces stationed on their territory. "This is not a joke, this is dangerous," he told the deputies, saying that "constitutional" measures would be taken to prevent what he called the privatisation of armed forces.

Although his political adviser, Mr Georgy Shakhnazarov, could not spell out what

such measures might be, he ruled out the use of force. He said he believed that, with time, republics would eventually rally round to "common sense" and join a new political and economic union.

"If republics want to go off and join Nato and the EC, let them try, and if they succeed, good for them, we'll all join," he said. "But will the EC agree

to give them gas, oil, and coal? Will it send in troops to stop people fighting with each other? I think not."

The new-look parliament is the product of last month's revolutionary Congress of People's Deputies which transferred political supremacy to republican parliaments after the abortive August coup. Designed as a temporary legis-

## Swiss voters serve notice on government

By William Dullforce in Geneva

THE SWISS have served a warning on the centre-right coalition that has governed them since 1959 by voting in larger numbers than expected for extremist groups in last weekend's general election.

With only a few votes left to be counted yesterday, the Auto party, which campaigned in the German-speaking region for tougher curbs on immigrants, had increased its representatives in the lower chamber from two to eight.

In recent months there have been several arson attacks on houses harbouring immigrants. The Swiss Democrats,

another anti-immigrant group, had won five seats, two more than they held in the current parliament, while the Lega dei Ticinesi, a newly founded populist party in the Italian-speaking canton, had secured two places.

To the left of the coalition the Greens had increased their representation from nine to 12. Switzerland's legendary political stability has been preserved but the four-party coalition has seen its dominance cut from 159 to 146 in the 200-member lower chamber.

Within the coalition, the conservative Radicals managed to

retain their position as the biggest party but saw their number trimmed from 51 to 44. The Christian Democrats also suffered a setback, losing six seats, reducing their representation to 36.

Late-reporting cantons deprived the Social Democrats of their early gains: with the possibility of one more seat still open they were stuck at the 41 they had held in the outgoing legislature.

The fourth member of the coalition, the People's Party, had retained its 25 seats.

As the swing to the right among voters became evident,

re-elected members of the coalition renewed calls for a revision of the system by which the seven-man federal council (government) has been elected and has conducted its business for the past 30 years.

If the immigration issue and dissatisfaction over inflation, the housing shortage and high health costs appear to have been the main factors behind the switch in votes, there have also been complaints about the government's incapacity to agree a clear policy on future relations with the European Community.



Are you surprised at how little high level nuclear waste has been produced?

A lot of people are.

There seems to be a general feeling that acres and acres of it are lying around, barely secured, with a radioactive life of thousands of years. Or that tons of it are being dumped at sea every year.

Nothing could be further from the truth.

At British Nuclear Fuels we are spending over £2 billion on a programme which allows us to continue dealing safely and carefully with nuclear waste.

A major misconception is that all nuclear waste is the same. Not true. In fact, it falls into three distinct types which emit varying intensities of radiation.

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The most radioactive is High Level Waste, which results from reprocessing spent nuclear fuel. We can recycle at least 97% of spent fuel into new fuel. It is the remaining 3% waste that must be carefully dealt with.

At present, high level waste is stored as a liquid inside double-walled, cooled stainless steel tanks enclosed in thick concrete walls.

However, we have brought into operation a process called 'vitrification', in which liquid waste is converted into glass and sealed inside stainless steel containers to be kept safe for the indefinite future. This method reduces the waste to 1/5 of its original volume. Or, to look at it another way, all the high level waste produced at Sellafield in the last 30 years could be contained in just 4 double-decker buses.

A far less radioactive type of nuclear waste, known as Intermediate Level Waste, occurs when the nuclear fuel rods are stripped in the first mechanical stage of reprocessing.

The scrap metal, sludge and residues that are involved in this operation are sealed in cement inside stainless steel drums, and stored in our special encapsulation plant until a suitable long-term home has been found.

The least radioactive waste of all however is Low Level Waste, such as paper towels, gloves, protective clothing and laboratory equipment which not only come from the nuclear industry but from hospitals, research laboratories and other industries where radioactive materials are handled.

Despite the fact that radiation from low level waste is negligible, we take no chances.

At Drigg in Cumbria, we have built and use a concrete vault the size of a dozen football pitches, and we are developing a method of compacting this type of waste which means Drigg won't be full until well into the 21st Century.

Intensive investigations have been carried out at sites at Sellafield and at Dounreay in Scotland to assess their suitability as a deep underground repository for intermediate and low level radioactive waste. Sellafield has been chosen as the site at which further investigations will be concentrated.

If you'd like to know more about the way we manage nuclear waste, write to British Nuclear Fuels, Information Services (B), Risley, Warrington WA3 6AS for our nuclear waste brochure.

Better still why not come and visit us at the Sellafield Visitors Centre in West Cumbria.

You could take a bus ride around the site.

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## INTERNATIONAL NEWS

## Hanoi accepts forced return of 250 refugees

By Angus Foster in Hong Kong

THE FULL repatriation of all Vietnamese boat people from Hong Kong who do not qualify as genuine refugees moved a step closer yesterday when Vietnam agreed to take back a small number of boat people, even if they do not want to go.

However, Vietnam is unlikely to agree to widen the scope of the agreement before the first flight of boat people is sent home, probably in mid-November.

This follows an announcement yesterday that Vietnam is prepared to accept the forced return of about 250 "double backer" people who have left Vietnam twice, and their families. The decision clears the way for Hong Kong to implement the first forced repatriation since 1989, when the colony was widely criticised, mainly by the US, for sending back 61 people against their will. This time US criticism is expected to be muted.

The agreement fell short of expectations because it does not address the more sensitive question of the almost 20,000

boat people in Hong Kong classified as economic migrants and therefore not eligible for resettlement in the West. Some of these boat people have been in Hong Kong for three years or longer and are likely to resist with force moves to send them back.

But government officials described the agreement on double backers as the "first step" and were confident of further agreements in the next few weeks. They said Vietnam remains committed to accepting all non-refugees but is cautious about the pace of returns.

Hong Kong also hopes the agreement, although limited, will persuade more boat people to return voluntarily rather than face possible forced repatriation. A forced return of boat people could also dissuade more people from leaving Vietnam.

Vietnam first indicated it was prepared to accept forced repatriation during talks in September. British officials believe Vietnam wants to solve the boat people problem to

improve its ties with Asian neighbours following the expected signing of the Cambodian peace accord tomorrow in Paris.

The agreement was expected last week but was delayed following internal differences within the Vietnamese government and worries about the logistics of receiving and resettling thousands of boat people. During talks last week in Hanoi, one option to announce full agreement and then iron out details was shelved and a decision made to move ahead step by step.

Under the agreement Hong Kong will give Vietnam two weeks' notice of the names of returnees. Hong Kong is expected to deliver a list of names to the Vietnamese soon and will try and persuade the double backer and their families to volunteer rather than be forced home.

The next obvious category for forced repatriation will be recent arrivals because these people have not been subjected to peer pressure.



Vietnamese boat people arrive in Hong Kong. Vietnam has agreed to allow forced repatriation in some cases

## Britain remains the odd man out

By Robert Mauthner and Michael Holman in Harare

BRITAIN yesterday remained the odd man out on South Africa in Harare in spite of a more moderate Commonwealth stance on the lifting of sanctions.

The final communiqué of the six-day Commonwealth heads of government conference reflected efforts to reach a consensus, but the gap that remained over the issue was underlined in a paragraph setting out the British position.

In contrast to the rancour and controversy that has marked successive Commonwealth conferences over the past decade, the Harare meeting succeeded in healing many of the wounds left by the clashes between Mrs Margaret Thatcher, the former prime minister, with her partners over South Africa.

The combination of progress towards a peace settlement in South Africa and the more conciliatory approach of her successor, Mr John Major, helped create a remarkably cordial and constructive climate.

In Harare, Commonwealth leaders who welcomed the important changes that had taken place in South Africa in the last 20 months unanimously agreed to lift so-called "people to people" sanctions immediately. These include consular and visa restrictions,

cultural and scientific boycotts and bans on tourist promotion and direct air links.

They also agreed that the UN arms embargo should stay until a democratic post-apartheid government was established. Unanimous agreement was not possible, however, on the timetable for lifting financial sanctions, such as access to IMF and World Bank resources, and trade and investment sanctions.

Britain, however, which has already resumed normal trade and investment ties with South Africa, stressed that it was dissatisfied with the pace at which its partners proposed to lift sanctions.

Britain did, however, succeed in softening the terms recommended by the Committee in New Delhi last month and which served as the basis for discussion at the Harare conference. The communiqué states that trade sanctions should be lifted "when appropriate transitional mechanisms had been agreed which would enable all the parties to participate fully and actively in negotiations."

Financial sanctions, the communiqué continued, should be lifted either "when agreement is reached on the text of a new democratic constitution" or "by agreement at South Africa's all-party conference or by an interim government." The original draft did not offer the second and third options.

## UK premier defends declaration

By Robert Mauthner and Michael Holman

MR John Major, the British prime minister, yesterday defended a spirited defence of the Commonwealth declaration of principles issued on Sunday, and rejected claims that its pledges on democracy and human rights would prove to be ineffectual. "I think it [the declaration] is a mixture of carrot and stick," he said.

All the member governments had put their name to matters that collectively came under the term of good government, even if the term itself was not used.

Mr Major said there had been "a rebirth of democracy around the world", but admitted the declaration did not provide for any obvious mechanism for enforcing pledges on democracy and human rights.

The force of "peer pressure" and the extent to which countries were increasingly interdependent would have a big influence on countries which fell short of the principles adopted.

He underlined the unanimous agreement reached by the heads of government on the need for a successful outcome of the Uruguay Round of trade negotiations. "Failure would be an absolute hammer blow for the developing countries. The cost to them of protectionism in the industrial world currently exceeds the total value of aid they receive from the industrial world," he said.

## Japanese markets expect rate cut

By Robert Thomson in Tokyo

JAPAN'S money supply expanded by a low 2.2 per cent last month, down from a revised 2.7 per cent growth in August, heightening stock and bond market expectations of a cut in official interest rates this week.

The low growth reflects the continued slowing of economic activity in Japan, and intensified the debate between the Bank of Japan and political and industrial leaders, who fear that companies are being

starved of funds and that the economy is in danger of stalling.

But the Bank of Japan said the decline was partly explained by the transfer of funds from bank accounts to postal savings accounts, which are outside the M2 plus certificates of deposit measure, and by a slowdown in bank lending.

It said that banks have money to lend, but companies have used other sources,

including cash reserves, to fund their investments.

Central bank officials have argued in recent days that there is no need for a change in monetary policy, but the release of the money supply figures yesterday prompted Japanese politicians and industry leaders to call for an immediate reduction in the official discount rate (ODR), which stands at 5.5 per cent.

Mr Russell Jones, senior economist at UBS Phillips &

Drew, said that the flow of money into postal savings, which offer higher interest rates, naturally increases when market rates fall. He said these transfers have exaggerated the slowdown in money supply expansion.

"The low growth is not a threat to economic health at the moment, but it is becoming a threat. It has just about reached the stage when the bank will need to do something," Mr Jones said.

## Korean talks restart as nuclear fears mount

By John Ridding in Seoul

MR Chung Won Shik, South Korea's prime minister, will travel to North Korea today to resume a series of high level talks which are aimed at

improving relations and easing tensions across the heavily militarised Korean border.

They come at a time of growing concern about North Korea's nuclear programme and increasing economic and diplomatic pressures on the North Korean regime.

The talks, which have been postponed from February this year and which will be held in Pyongyang, are the fourth in a series of meetings between the prime ministers of the two countries.

"We are hopeful for progress," said Mr Lee Dong Bok, special assistant to the prime minister and a member of the South Korean delegation.

"North Korea is under unusually heavy pressure to change and we have been preparing a very flexible position on most of the outstanding issues," he said.

But western diplomats in Seoul said that they expected little progress on the issue of North Korea's nuclear programme, the subject of greatest concern. South Korea and its allies believe that North Korea will be able to produce a nuclear device by the middle of the decade.

## Religious tensions grow in Ayodhya row

By David Housego in New Delhi

TENSION between Hindus and Muslims in northern India rose sharply yesterday as Hindu militants embarked on the final phase of their campaign to build a new Hindu temple at Ayodhya on land claimed by Muslims.

Leaders of the Vishwa Hindu Parishad (VHP), the Hindu crusading movement, took part in religious ceremonies at Ayodhya in Uttar Pradesh intended to mark the beginning of construction.

At the same time Mr Ashok Singhal, the VHP leader, made what he called a "last appeal" to Muslims to hand over voluntarily the 16th century Babri mosque that stands in the way

of the completion of the temple.

The controversy over the temple has become the most divisive issue in Indian politics. In recent days minor temples and buildings close to the mosque have been pulled down preparatory to construction work beginning.

Muslim organisations yesterday condemned the state government's compulsory acquisition of the disputed land around the mosque and warned that demolition of the mosque "will tear the fabric of our secular society".

Over the past two years, the dispute has provoked widespread rioting and bloodshed.

## Zaire slides towards chaos

By Julian O'Zanne in Nairobi

PRESIDENT Mobutu Sese Seko's continued sabotage of attempts to install a credible government to pull Zaire out of severe economic and political crisis threaten to plunge the country back into violent upheaval.

Troops of the elite presidential guard yesterday fired tear gas and shot into the air to disperse thousands of pro-democracy demonstrators who gathered to support Mr Etienne Tshisekedi, the sacked opposition prime minister, in his failed bid to enter his office.

The tussle between the two

men came after state-run television yesterday carried Mr Mobutu's official decree dismissing Mr Tshisekedi - the man he was forced to name as prime minister after riots and looting last month wrecked the capital Kinshasa and left 250 people dead.

Amid signs of growing tension yesterday, soldiers set up roadblocks and checkpoints on roads leading into the city and blocked access to embassies where demonstrators tried to take refuge.

Western diplomats believe an opposition-led interim gov-

ernment with substantial powers wrested from the president is the only hope to prevent the country slipping towards chaos.

France and Belgium, who still have paratroops in Kinshasa, have made it clear to Mr Mobutu that such a government is a pre-condition for their support and assistance.

Yesterday's move by Mr Mobutu, after three weeks of political impasse, suggest an optimism the president was willing to share power in the interests of national unity and stability has been ill-founded.



Mobutu: intervention

## South African ore for Japan

JAPANESE steel companies ended their "self-restraint" in trade with South Africa by signing an iron ore import contract in advance of today's announcement that Tokyo has lifted economic sanctions against Pretoria, reports Enkio Terazono from Tokyo.

Wipac Steel, the largest Japanese steel maker, said it and five other companies - NKK, Kawasaki Steel, Sumitomo Metal Industries, Kobe Steel and Nishin Steel - have finalised a five-year ore contract.

## Environment agencies start to flex their muscles

John Hunt on some far-reaching proposals on population control, energy conservation and pollution

AN INTERNATIONAL plan was unveiled yesterday to "harness the total resources of humanity" to improve the global environment by measures which include massive reductions in energy consumption and the use of natural resources in industrialised countries.

The proposals, put forward by the United Nations Environment Programme (UNEP), the world conservation union (IUCN) and the World Wildlife Fund (WWF), envisage the establishment of a new world organisation - probably based on the United Nations - to co-ordinate environmental protection and encourage sustainable development which does not deplete natural resources.

The report, entitled "Caring for the Earth," suggest that the UN general assembly could co-ordinate the system through its committees and produce annual reports on the state of the world environment.

It calls for a global alliance of governments committed to a "universal declaration" on sustainable growth and environmental protection which would be signed by all countries by the year 2000. The alliance would have the backing of

business and industry, religious leaders and citizens' groups.

Launching the report in London, the Duke of Edinburgh, president of the WWF, warned that unless population growth was halted soon world resources would no longer be able to support humanity's needs and economies would face collapse.

The report was given the backing of the UK government by Mr Tony Blair, junior environment minister, and was also endorsed by Mr Neil Kinnock, the Labour Party leader, and Mr Paddy Ashdown, leader of the Liberal Democrats.

The result of three years' work by scientists and conservationists, it was launched next June's "Earth Summit". "The resources of the planet are already over-stressed," said Mr Charles de Haes, director general of WWF International. "Governments must act but they will only succeed with their peoples' support."

With regard to energy and raw materials, the proposals urge high energy use countries to reduce per capita energy consumption to 80 gigajoules a year. This would mean huge reductions in energy use by the US (currently 280 giga-



joules) and Britain (now 150 gigajoules). They should reduce energy consumption by one per cent a year until the end of the century and two per cent annually afterwards.

Those with consumption at or just below 80 - such as Israel and Venezuela - or far below this level, such as China and Bangladesh, should not exceed it as they industrialise further.

High consumption countries should introduce economic incentives and taxes to encourage energy conservation and raw materials and abolish subsidies that distort resources

prices. "Taxes on raw materials could be set similarly to encourage more efficient technologies, more use of renewable resources and more durable products," the report states.

On economic measures, the report suggests that environmental quality and natural resources should be properly valued in national accounting in order to achieve sustainable development. There should be a "true statement" of national income showing depreciation or preservation of natural assets.

Individual companies should commit themselves to sustainability and environmental excellence and the minimisation of raw material and energy use. They should disclose the results of environmental monitoring of their activities and not use commercial confidentiality to frustrate the release of information.

Charges for polluting the atmosphere should be higher than the cost of removing that pollution. The report believes this would "motivate industry to prevent pollution and promote development of anti-pollution technology."

The report says that since the mid-19th century the con-

centration of carbon dioxide

had increased by 27 per cent, seriously affecting global climate. By the year 2005 higher income countries should have cut emissions of carbon dioxide by 20 per cent from 1990 levels. Carbon dioxide is the main contributor to global warming.

High income countries should by the year 2010 have cut sulphur dioxide emissions, which causes acid rain, by 10 per cent of 1990 levels and manufacture of CFCs (chlorofluorocarbons) should have stopped. CFCs damage the ozone layer which screens life from damaging levels of ultra-violet radiation.

Net global forest depletion should have ceased by the end of the century and all countries should have adopted comprehensive strategies to safeguard the biological diversity of their plant and animal life.

On the question of population growth, chances of a satisfactory life, says the report, are remote unless present rates of population growth are "drastically reduced." All countries should bring down fertility rates to 2.1 children - the stable replacement level - as rapidly as practicable with most countries attaining this goal by 2010 at the latest.

## UK group loses Kuwait deal to US rivals

By Victor Mallet, Middle East Correspondent

A CITY of London consortium bidding to advise Kuwait on claiming compensation for Gulf war damages has lost the lucrative contract to two American rivals, including the US affiliate of one of its own members.

The City Kuwait Group (CKG), which included accountants KPMG Peat Marwick of the UK and lawyers Clifford Chance of London, was beaten when Kuwait awarded separate contracts to KPMG Peat Marwick of the US and the American lawyers Cleary Gottlieb Steen and Hamilton.

Lord Limerick, CKG chairman and former head of the British Invisibles Group, speaking at a conference in London yesterday on Kuwait's future, expressed disappointment that the Kuwaiti government had not adopted the group's package for dealing with Kuwaiti compensation claims to be presented to the United Nations.

Privately, CKG members are bitter that they lost the contract - worth tens of millions of dollars - despite British political support from the prime minister down, and are outraged at the involvement of KPMG Peat Marwick of the US. "It caused an unholy row,"

Mr Hamoud al-Rogha, the Kuwaiti oil minister, said yesterday that the last 58 of the 732 wells set ablaze or destroyed by Iraq during the Gulf War would be capped by early November.

said one lawyer yesterday. "All the people involved were absolutely furious."

Members of CKG say that KPMG Peat Marwick in London is embarrassed by the outcome because it was apparently not aware of the approaches being made to Kuwait by its US sister organisation until late in the day.

Mr Bruce Bingham of KPMG Peat Marwick in New York yesterday described the US and UK arms of the firm as "separate partnerships" and confirmed that the US partners would be establishing neighbourhood offices in Kuwait to process claims.

Although they have lost the chance to sell a consolidated compensation plan to the Kuwaitis, the various loss adjusters, financial and legal experts making up the CKG are still hoping to work on peripheral Kuwaiti contracts or are already doing so.

They are particularly disappointed at losing the bulk of the compensation work because Sheikh Saad al-Sabah, the Kuwaiti Crown Prince, and Sheikh Ali Khalifa al-Sabah, the then finance minister, were enthusiastic when Lord Limerick first presented the proposal to them in April.

Thereafter Sheikh Ali was dropped from the Finance Ministry and the Kuwaiti government decided to distribute the compensation work to different groups. Rivals of the CKG suggested its package was too expensive.

British businesses have lost visible as well as invisible trade in Kuwait after a promising post-war start. Delays in finalising a contract for a British oilfield freighting consortium known as the Kuwait British Group (KBG) has already cost the group part of the freighting component of its work.

## ROYAL OPERA HOUSE

## CANCELLED PERFORMANCES

The Royal Opera House announces with regret that because of a wage dispute with the Orchestra of the Royal Opera House all performances by The Royal Opera and

The Royal Ballet at the Royal Opera House have been cancelled until further notice. The Royal Opera House apologises for the disappointment and inconvenience that this will inevitably cause and hopes that it will not be long before a solution to the dispute can be found. The Box Office will continue to take forward bookings on the understanding that money will be refunded if the House remains closed.

## REFUNDS

Full refunds on the face value of tickets are available once the performance date has passed. Refunds can be claimed on presentation of tickets in person at the Box Office or by returning the tickets by post to:

Refunds, Royal Opera House,  
Box Office, P.O. Box 6, London WC2E 7QA

Tickets purchased by credit card will be credited to the card-holder's account.

Further information on  
071 240 1066/1911  
071 836 6903 (recorded)

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# How can exporters reduce their currency risks without turning their businesses upside down?



Risk management is not everyone's forte. Surprises may occur that can turn a company topsy-turvy. One thing is certain: standard solutions and all-out efforts aren't enough. Systematic, well-planned investment programs are necessary. And this is where the UBS Institutional Asset Management staff comes in, with its specialized know-how, international experience and Union Bank's excellent global connections. For example, UBS Institutional Asset Management can help

reduce your currency risks. An analysis of your specific currency exposure provides the basis for effectively controlling these risks through your portfolio investments. And this is done by optimizing your asset allocation. With the help of derivative instruments and sound investment diversification, risks can be scaled down — without affecting the income you require. If you wish to learn more about the way we manage institutional portfolios, one of our investment professionals will be happy to talk with you.

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## INTERNATIONAL NEWS

## Beijing issues renewed warning about finances

DESPITE improvements in China's economic performance, the government's financial situation remains troubled, crushed under the weight of subsidies and loss-making state enterprises, a senior official said yesterday. Reuter reports from Beijing.

"The national economy has regained normal growth," Zhang Zhongli, spokesman for the State Statistical Bureau, told a news conference. "Nevertheless, some problems and unstable factors remain in the performance of the national economy. First and foremost is the difficult situation of government finance."

After the collapse of communist rule in eastern Europe and the Soviet Union and the devastating economic problems there, Beijing's hardline communist leaders have staked their legitimacy on the results of continued economic reform, diplomats said. Store shelves are stocked with food and vegetables and private stalls offer a wide variety of goods.

Beijing may be mortgaging its future, however, with huge subsidies to keep prices stable and loss-making state industries afloat. Last week a finance ministry official, Wang Xingyi, told the state media: "Our finances are facing extremely serious problems and the whole financial situation is quite grim."

Zhang said 36 per cent of state enterprises, the cornerstone of the socialist economy, were running with losses in the first three quarters totaling 20bn yuan (\$3.7bn).

But there had been some improvement recently, with third-quarter losses on average 5.8 per cent below those of the

first two quarters. Total stockpiles of unwanted, unsold goods are now worth more than 500bn yuan, with over 200bn yuan in the plants' warehouses and 300bn yuan in stores and at distributors.

Enterprises are still choked by debt chains as one loss-maker cannot afford to pay back another. Zhang said debts between enterprises now totalled 200bn yuan.

With the government pouring some 170n yuan in loans into the enterprises to try to clear the debt from the end of last month, Beijing runs the risk of stimulating a burst of inflation, economists said.

Bank loans are growing faster than the economy as a whole "thus aggravating the pressure of potential inflation", Zhang said. Inflation in cities averaged 8 per cent in the first nine months, but was well over 10 per cent in cities such as Beijing and Shanghai. Retail price inflation in the country as a whole rose to 4 per cent in September, against an average of 2.5 per cent in the first nine months.

Gross national product grew a real 6.8 per cent in the first nine months against the same period a year earlier, and Zhang said the rate for the year would be greater than 6 per cent. GNP grew 5 per cent in 1990 over 1989. Industrial production, which grew at 13.9 per cent in the first three quarters, would maintain that level of growth when the whole of 1991 was compared with 1990, Zhang said.

Wages and salaries of urban employees grew a real 6 per cent in the three quarters, while farmers' cash income grew a real 7 per cent.

## Chinese economic reform damages health service

CHINA'S public health service has seriously deteriorated in the past decade with the adoption of market-oriented economic reforms, according to western experts.

While the country's living standards have generally risen, its co-operative medical care system has collapsed in many rural areas since the communes were dismantled in the early 1980s. "Sanitation and health services have suffered since the communes were disbanded and there is no longer a community financial base to provide for those services," one western observer said.

Agricultural collectivisation formed the foundation for medical care in China in the 1950s when the funds of collective enterprises paid for medical services in the rural areas. In the 1960s, under Chairman Mao, the government pioneered the use of "barefoot doctors", partially trained medical workers who provided rudimentary medical care in the countryside. Their example later served as a model for much of the developing world.

Beijing also made the improvement of health care in rural China a top priority. In the 1980s and 1990s co-operative medical care was responsible for basic sanitation, hygiene, health education, and public health services such as immunisation and ante-natal care.

All of these services were free or very cheap for most peasants, because they were paid for by the collective. This is no longer the case. Individuals are now charged a fee for each service provided. This is the primary system of financing medical care in the rural areas.

In the cities, private entrepreneurs or many others working in small non-state run

Medical care has collapsed in many rural areas, writes an FT correspondent

enterprises must also cover their own medical costs.

"The real problem with this fee-for-medical-service is what the Chinese don't pay for. Under the previous system, preventive and educational services, insurance and immunisation were covered and increased the general level of health," one western observer said. With the demise of co-operative medical care, public health has suffered significantly. Disease prevention measures and general hygiene and sanitation are no longer the responsibilities of the village doctor.

Large public health campaigns have gradually been eroded by lack of funds. For example, hygiene measures, such as testing to ensure that night soil does not leak into the drinking water, are not done as routinely as they should be.

And with the lack of community-based labour, there is no leverage to implement sweeping disease prevention measures, similar to past rat and insect eradication campaigns.

Apart from the gradual decrease of public health measures in the poorer areas, pressure on village doctors to earn more money is growing. Under the new fee-for-service system, doctors are not paid for the range of hygiene, sanitation and educational services they formerly helped to provide.

While doctors were not paid separately under the collective system, these public health services were incorporated into the broad scope of their activi-

ties. In addition to obtaining fees for services, doctors also prescribe and dispense medicine. They now earn royalties from the drugs they sell, in contrast to the time when they were part of a collective and all royalties were simply put back into the collective.

This pressure to sell more drugs than are necessary is exacerbated by the tendency of many doctors to over-prescribe medicine. In some cases, more complicated, expensive forms of treatment, such as intravenous drips to inject medicine, are often used when a simpler, less costly method would suffice, western experts said. From the patient's viewpoint, because a visit to the doctor is now more expensive, many wait longer until they are even more sick and can be attended to at a more sophisticated county clinic.

In the face of all of these problems, the Ministry of Public Health is exploring and experimenting with a wide variety of methods of financing and insurance schemes. It hopes by 2000 to have revamped the system entirely.

"But how will it get better unless the state gives them money?" one western expert wonders.

The ministry has also taken steps to raise the qualifications of the "barefoot doctors".

Despite the enormous problems, China's health care system by far surpasses that of many other developing countries. After Japan and South Korea, life expectancy is the highest in Asia.

The country's infant mortality rate and the number of contagious diseases are also relatively low according to western experts. The days when entire villages had to be evacuated because of disease are long past.



The three candidates for the leadership of Japan's Liberal Democratic party at a news conference in Tokyo yesterday ahead of next Sunday's party election. They are (left to right): Mr Kichii Miyazawa, Mr Michio Watanabe and Mr Hiroshi Mitsuoka. The winner becomes prime minister

## UN team in Burma to visit Nobel laureate

A UNITED Nations human rights mission arrived in Burma yesterday to try to visit Ms Aung San Suu Kyi, the detained opposition leader awarded the Nobel Peace Prize last week for standing up to "a regime characterised by brutality". Reuter reports from Bangkok.

The mission, led by a Japanese university professor, Mr Yozo Yokota, is to stay in Burma until the weekend, said an official of the UN Development Programme contacted by telephone in Bangkok.

Western and Asian diplomats in Bangkok and Rangoon said Mr Yokota would try to investigate a wide range of human rights issues and seek access to Ms Aung San Suu Kyi.

She has not been seen by outsiders since early this year, when she was spotted from houses overlooking the garden in her compound on Rangoon's University Avenue.

A similar mission last year was denied access to her and other detained dissidents.

Ms Aung San Suu Kyi was put under house arrest in July 1989 after her outspoken attacks on the ruling military junta, which shot dead thousands of people during a mass uprising for democracy in 1988. The regime has jailed or persecuted thousands of opponents.

Mr Yokota will report to the UN Human Rights Commission in Geneva. He declined to comment on his mission when he was contacted before leaving Bangkok.

Last year, the Rangoon government greatly restricted a UN mission led by another Japanese professor, Mrs Sadako Ogata, when it attempted to seek information on human rights violations.

Last Monday, the Nobel committee in Norway awarded Ms Aung San Suu Kyi its annual peace prize for her courage in standing up to the Burmese regime.

Human rights groups, including Amnesty International, have catalogued numerous testimonies of sometimes fatal torture in Burma.

A senior member of Ms Aung San Suu Kyi's National League for Democracy (NLD) died in detention during Mr Ogata's visit last November.

The junta said Mr Maung Ko committed suicide. Relatives alleged that heavy bruising all over his body showed he had been tortured to death.

The NLD won the May 1990 general election by a landslide but the junta has refused to hand over power and has arrested most NLD leaders.

The award of the peace prize to Ms Aung San Suu Kyi has intensified international calls for the junta to release her and honour the election result.

Last year, Sweden introduced a motion at the UN General Assembly criticising the junta's human rights record and expressing concern about its failure to step down. It was withdrawn after opposition, but Sweden plans to reintroduce it this year.

## Taiwan joins fund in Latin America

TAIWAN, trying to use its economic strength to break out of international isolation, will join the Central American Bank for Economic Integration as a sovereign state after pledging it \$150m, Reuter reports from Taipei.

Mr Federico Alvarez Fernandez, president of the bank, said Taiwan would become an extra-regional member after approval by member countries, probably by the end of this year. "We believe the island can contribute to the economic development of Central America," he said yesterday.

The multilateral lending institution covers Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, which are among the 29 states that formally recognise Taipei. Nicaragua restored relations last November.

Taiwan will join under its official name, "Republic of China", the island's foreign ministry said.

The bank will be the 11th international organisation to admit Taiwan under its official name. Taipei has had to use different names, such as "Taipei, China", to take part in other groups. The island is locked in a struggle against China for international recognition. Beijing views Taiwan as a renegade province and regularly seeks to prevent it from expanding ties with foreign countries.

## OCTOBER MADRID

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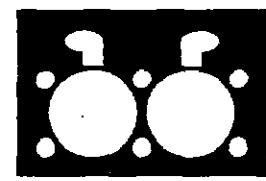
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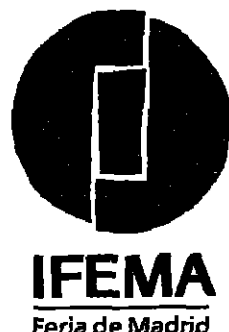


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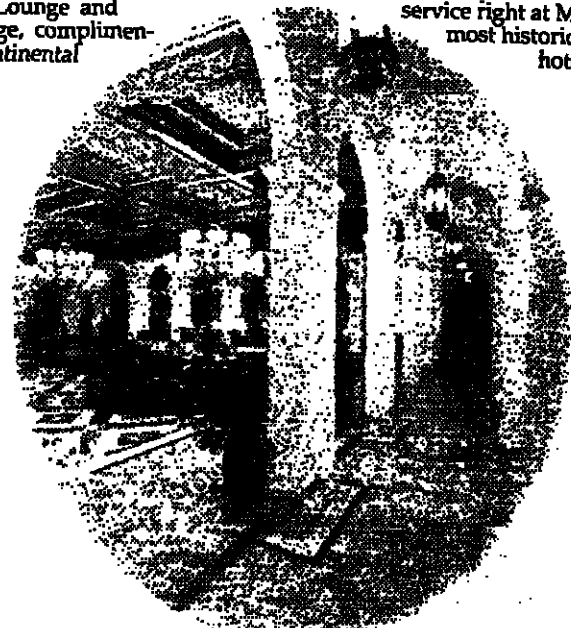
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## Bush poised to unveil economic growth package

# White House considers middle-income tax cuts

By George Graham in Washington

THE Bush administration is considering cutting taxes for middle-income families as part of an effort to stimulate economic growth, the White House said yesterday.

The move is in response to proposals from the Democratic-dominated Congress for a \$500 tax cut targeted on families earning between \$20,000 and \$75,000 a year.

President George Bush plans to introduce an economic growth package in the next few weeks, but White House officials have until now indicated they were concentrating on a cut in the capital gains tax rate, coupled with personal pension incentives and tax credits for research and development.

Both Republicans and Democrats in Congress have been calling for tax reductions in an

attempt to "jump-start" the economy, which has shown few convincing signs of recovering from the recession.

The administration was at first reluctant to admit to any doubts about the recovery, but has gradually changed its tune.

President Bush has yet, however, to spell out in detail his plans to spur economic growth, and has declined to give outright support to legislation proposed by Senator Phil Gramm of Texas, which would include reducing the top capital gains tax rate to 19.5 per cent and indexing capital gains to inflation.

The White House's acceptance of middle-income tax cuts could provide common ground between the Republican and Democrat proposals, although there remains a yawning gap, notably over the

issue of capital gains tax and the funding of any tax cuts.

From the Democrats' side, Senator Lloyd Bentsen, chairman of the Senate finance committee, proposed this weekend a \$300 tax credit for each child in a taxpayer's family, at an estimated budget cost of \$60bn over five years. This would be paid for by cutting defence spending by 5 per cent over the next five years.

Mr Dan Rostenkowski, Democrat chairman of the House ways and means committee, is expected to produce his own package by month's end.

New tax legislation is unlikely to take effect before next fiscal year, which starts in October 1992, and so cannot be expected to provide immediate stimulus for the sluggish US economy.

## San Francisco Bay blaze leaves 10 dead

CALIFORNIAN firefighters were yesterday still struggling against a fire which has engulfed residential neighbourhoods close to the cities of Oakland and Berkeley, killing 10 people and destroying an estimated 600 homes, writes Louise Kehoe in San Francisco.



An Oakland resident attempts to comfort his dogs on Sunday afternoon as fire destroys his house

Progress will depend largely on the weather, which firefighters feared was turning against them. Winds, which fanned the flames on Sunday, died down early yesterday, only to pick up again. However, there were forecasts of drizzle, which could help extinguish "hotspots" continuing to burn in the area.

More than 1,000 firefighters from throughout the state struggled to contain the blaze, which cast a pall of smoke over the region.

Preliminary estimates of the damage are in excess of \$1.5bn. The fire has cut a swathe through some of the most exclusive residential areas of the San Francisco Bay area.

Worst hit were areas of the Oakland and Berkeley hills, where million dollar homes nestle among wooded areas with panoramic views of the San Francisco Bay.

The cause of the fire remains uncertain, but it is believed to have been sparked by a small brush fire which was extinguished on Saturday. Firefighters say this reignited on Sunday morning and spread after jumping firelines.

Strong winds whipped up the blaze on Sunday, rapidly spreading the fire over an estimated 1,700 acres. Vegetation was tinder-dry, a result of five years of drought. Water supplies, which are normally pumped to the billy region, failed when pumping stations were engulfed by flames.

Thousands of residents of Oakland and Berkeley, whose homes are still threatened, have been evacuated. Red Cross shelters housed about 1,000 people on Sunday night. Two thousand students at the University of California, Berkeley, were evacuated as the fire neared the campus. Classes at the university and most schools in the area were canceled yesterday.

The dead included a police officer and a Fire Department battalion chief, said Mr Renee Domingue, the city's emergency planning co-ordinator.

Governor Pete Wilson, who toured the area on Sunday, called the blaze the worst he had ever seen. He has declared a state of emergency, freeing state funds to help authorities cope with the wave of homeless people.

## Talks over missile defences to resume

By William Duitorce in Geneva

THE US and the Soviet Union have agreed to resume talks in Geneva early in January on President George Bush's new proposal on ballistic missile defences.

Washington's plan for Global Protection Against Limited Strikes (Gpals) represents a radical departure from its earlier approach in the bilateral defence and space talks, which have been conducted inconclusively for the past six years.

Mr David Smith, chief US negotiator, said yesterday it would cost the US \$41bn to complete the programme before the end of the century.

The Soviet Union, under President Mikhail Gorbachev, has been reluctant to discuss the Gpals proposal to US concessions in other areas, such as a halt to nuclear tests.

Mr Smith denied the US planned to co-ordinate its ABM defences with those of the Soviet Union.

"The US also has no plans 'at this time' to share technology with the Soviets," he said.

Gpals provides for a three-layer defence comprising transportable tactical ABM systems operating at the theatre level, ground-based strategic missile interceptors in the US, and space-based "brilliant pebble" interceptors.

The Soviets, who recognised there was a problem in dealing with ballistic threats from third countries, have been asking questions about the US proposal, tabled in Geneva on October 3, Mr Smith said.

Moscow had resisted SDI, claiming it was incompatible with the 1972 anti-ballistic missile (ABM) treaty.

Soviet President Mikhail Gorbachev's willingness to discuss the Gpals proposal showed there was also a change in Soviet attitudes to anti-ballistic missile defence, Mr Smith said.

During three weeks of discussion in Geneva the Soviets had not tried to tie the Gpals proposal to US concessions in other areas, such as a halt to nuclear tests.

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## Setback in tobacco liability suit

THE Supreme Court, the highest US judicial body, has asked both sides to reargue a key tobacco industry liability suit, prompting speculation that the judges were unable to reach a definitive conclusion, writes Nikki Tait in New York.

The case, *Cipollone v Liggett et al*, was heard by eight judges on the Supreme Court earlier this month. The arguments centre on whether a federal law requiring tobacco companies to place warning notices on their cigarette packs prevents smokers who subsequently suffer ill health from suing them under state product liability laws.

It is the first time the Supreme Court has become involved in the emotionally charged issue of smokers' suits.

No reason was given for asking for new arguments, but the delay will allow new court member Judge Clarence Thomas to take part in the decision.

The new hearing is likely to take place next year.

## Slow foreign investment worries Venezuela

By Joe Mann in Caracas

VENEZUELA'S economy in 1991 is growing at the fastest rate on record in recent years, but key non-traditional investment and non-traditional exports - are lagging far behind their performance in 1990, and considerably below government expectations.

The Superintendency of Foreign Investment, a government agency, said that direct registered foreign investment in Venezuela for the first eight months of 1991 was down by 41 per cent from the same period in the previous year.

At the same time, non-traditional exports (principally petroleum products), among the highest-priority areas, have fallen by around 30 per cent in

value for the January-September period this year, according to government figures.

Officials say the government's decision this year to halt the application of debt-equity swaps to small and middle-sized investment projects has slowed the pace of new foreign investment. Some swaps have been approved for so-called "megaprojects", but foreign investors are still negotiating the financial arrangements for these large projects and big new investments have not as yet been made.

According to government figures, direct foreign investment in Venezuela last year totalled \$3.5bn, up \$49m (1.6 per cent) from 1990.

## Argentina to liberalise oil industry

By Joe Mann in Buenos Aires

ARGENTINA'S President Carlos Menem has announced a drive for foreign and domestic investment in oil exploration, under a far-reaching plan to deregulate the industry, writes Donald Greenleaf in Buenos Aires.

Mr Menem also pledged to accelerate the partial privatisation of the state-owned oil company YPF. This would involve, under a plan to be presented to Congress tomorrow, the sale of 49 per cent of the shares to private investors.

New laws, also to be presented to Congress tomorrow, will give companies the right to dispose of oil by export or sale on the domestic market at international prices.

## Mexican trade deficit wider as imports surge

By Damian Fraser in Mexico City

MEXICO'S trade deficit widened to \$3.75bn in the year to August, reflecting a surge in imports, up 26.6 per cent compared to the same period last year. Excluding revenues from maquiladoras (in-bound plants), the deficit was \$6.44bn.

The eight-month non-maquiladora deficit of \$6.44bn is almost triple that recorded in the same period in 1990, and four times that in the first four months of this year. On current trends the non-maquiladora deficit for the year will exceed \$8.5bn, leading to a current account deficit of over \$10bn, or more than 3.7 per cent of GDP.

The deficit is nevertheless easily financeable, thanks to

continued inflows of foreign investment, mainly into stocks and bonds. In the first half of this year Mexico ran a balance of payments surplus of \$10.5bn. International reserves now stand at a record \$16.27bn.

The huge inflows of foreign money have increased speculation that President Carlos Salinas de Gortari will fix the peso to the US dollar, or reduce the current devaluation of 5 per cent a year, in his state of the union speech on November 1.

The trade deficit reflects imports of \$24.36bn, and exports of \$20.61bn. Of the latter, non-oil exports amounted to \$12.47bn, a 13.5 per cent increase over the same period last year.

## WORLD TRADE NEWS

## Caribbean textile makers seek open access to Nafta

By Canute James in Kingston

CENTRAL American and Caribbean garment and textile producers, who ship most of their output to the US, are asking the US government for unrestricted market access so they can compete with Mexico when that country becomes a part of the North American Free Trade Area (Nafta).

The regional producers, which last year exported \$750m worth of goods to the US, representing a 12 per cent share of the market, say continued quota curbs and imposition of duties on their products would kill their industries by giving Mexican exports a clear competitive edge.

"This will wipe out an industry in the Caribbean and Central America whose exports to the US last year were valued at \$1.8bn," said Mr Peter King, Caribbean Co-ordinator of the Central American and Caribbean Textile and Apparel Council, and chairman of the Garment and Textile Commission of the

Caribbean Common Market.

"If Mexico gets free access and we do not, millions of dollars in investments, by US and regional businessmen, and tens of thousands of jobs will be lost."

The Central American and Caribbean request will be put to the US, Canada and Mexico at a meeting in Dallas, Texas, on Friday. The meeting, convened by the US Apparel Industry Council, will be attended by Mr Ron Sorini, chief US textile negotiator.

"The current US-Mexico bilateral text contains language which suggests all quotas will be dropped immediately on the signing of the Nafta agreement," said Mr King. "An added advantage to Mexico is in lower shipping costs in moving the products across the US-Mexico border."

The last of the regional exporters to the US last year were the Dominican Republic, Costa Rica, Haiti, Jamaica and Honduras.

## Suez Canal finds itself at the crossroads

Plans are under study to double the size of ships the waterway can take, Max Rodenbeck writes

THE SUEZ Canal, a crucial avenue of world trade, has reached a crossroads. Ten years after shelving plans to expand, the Egyptian state authority which runs the waterway is again considering whether to spend over \$1bn (\$500m) to double the size of ships the canal can accommodate.

The Suez Canal Authority (SCA) faces difficult choices. It must consider the size and shape of the future world shipping fleet, predictions of international trade flows and the projected price of oil, plus the cost of dredging millions of cubic metres of dirt.

The canal has achieved a solid financial performance with its present capacity, but Egypt wants to win custom from the larger ships which now characterise the world's merchant fleets.

Confounding predictions that the Gulf war would severely dent income, the canal turned over a record \$770m in the year to June, a 17th year of record income. A surge in Saudi oil exports helped to boost cargo traffic through the canal.

The tonnage of warships

using the canal jumped by almost 300 per cent in 1990, but this still made up less than 2 per cent of total traffic. Tolls were raised 6 per cent in January of this year, in line with the authority's estimate of world inflation, and traffic volume in the first half of 1991 matched 1990 levels.

Already, the 100-km waterway can accommodate vessels with a draught of up to 53 ft. In ballast, typically en route from Rotterdam to load oil in the Gulf, supertankers of 555,000 dwt and over 200 ft in beam can scrape through the canal. But the maximum size for fully laden ships is 150,000 dwt, prohibiting passage of loaded supertankers.

Although the channel's numerical capacity is only 80 ships a day, passing in alternating northward and southward convoys, this limit has never in fact been reached. While tonnage has grown, the daily average of transit has fallen from a peak of 83 in 1981 to less than 60 today.

With no need to increase numerical capacity, for example, by building extra bypasses to allow two-way traffic, the SCA has successfully focused



Traffic through the canal: a solid financial performance

on attracting vessels of larger size, lured by a system of rebates, the number of supertankers of more than 300,000 dwt using the canal has tripled since 1985.

But because of the increasing unit size of the world's oil fleet, the canal has seen its share in the oil transport market drop. Partly for meeting demand, oil tankers have preferred to send Atlantic-bound Gulf crude either around the Cape or through the Suez-Mediterranean oil pipeline (Sumed), which, like the Suez Canal, links the Red Sea to the Mediterranean.

Increasing the canal's share of this market, which is expected to grow by 40m tonnes a year over the next decade, will mean widening and deepening the channel. SCA officials say the cost of new works depends on which of five options is chosen. Given the canal's dependable income, financing is unlikely to be an obstacle.

Three separate consulting teams, among them NEDECO,

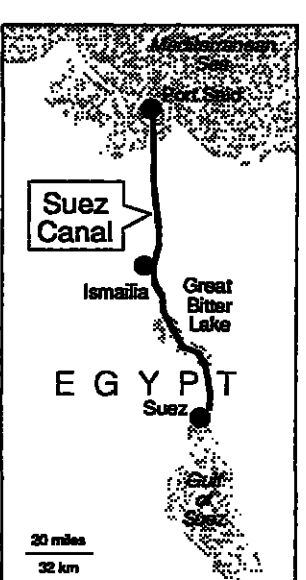
the Dutch company, have drawn up feasibility studies on deepening the channel from the current 53 ft to 56 ft, 62 ft, 68 ft, or 72 ft. Allowing ships of 72 ft draught, the canal could accommodate fully laden supertankers of up to 350,000 dwt. Authority officials say a draft limit of 56 ft could be reached in two years without interrupting canal traffic.

Some 30 dredging companies from around the world have already submitted pre-qualification bids for the work. Mr Ezat Adel, the authority's chairman, says he expects all the studies to be ready shortly. A final decision could then be produced in a matter of months.

Company spokesmen are cagey about which choice is most likely, but observers say the canal will stay the same size. Even modest expansion could cost up to \$1bn, an investment which could take a decade to recoup.

The competing SUMED pipeline, meanwhile, has already begun work to raise its capacity by 50 per cent to 2.4m barrels a day.

The waterway's last expansion, completed in 1980 at a



cost of \$1.3bn, required the use of 37 dredgers from 10 countries. Financing, much of it on concessional terms, came largely from Japan. Falling oil prices and a global economic slowdown in the early 1980s caused the authority to shelve a planned second phase.

## Researchers cast doubt on Asean free trade pact

THE recent accord by south-east Asian trade ministers to form a six-nation free trade zone within 15 years "should be taken with grain of salt" as unlikely to affect trade patterns substantially, the Hong Kong-based Political and Economic Risk Consultancy (PERC) said, Reuters reports from Singapore.

The plan, announced by Association of South-East Asian Nations (Asean) officials in Kuala Lumpur on October 8, "was a hybrid, committing member states to surprisingly little. Asean, already 24 years old, does not have a particularly impressive track record when it comes to promoting economic co-operation between member states," Asean groups Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand.

The pact, endorsed by the Asean ministers, is to be refined into a more detailed package for approval by Asean heads of state at their summit

in Singapore next January. It aims to cut Asean tariffs on manufactured goods gradually and sector-by-sector over 15 years. But PERC said the plan's limited nature and strong rivalries would inhibit it. "For example, individual countries retain the right to opt out of the common effective tariff scheme in sectors in which they do not feel comfortable."

The Asean framework accord covers only manufacturing, omitting trade in agriculture or services, "thus sidestepping a minefield of conflicting interests regarding matters such as the development of the banking industry and the production of palm oil, rubber and other commodities."

Even for manufacturing, Indonesia's refusal to cut tariffs on products from more developed Asean neighbours pushed the free trade deadline beyond Thailand's proposed 10 years.

## Polish airline seeks to halve fleet of 42 aircraft

LOT, Poland's state-owned airline, plans to halve its fleet of 42 aircraft and eliminate all its Soviet-built aircraft by the middle of the decade, Christopher Bobinski reports from Warsaw.

Mr Bronislaw Kilmaszewski, LOT's managing director, said yesterday all seven of his IL-62s which used to fly on the line's transatlantic routes are to be grounded next month.

He was speaking soon after LOT signed a contract with Boeing for delivery by 1994 of nine Boeing 737s worth some \$300m (\$174.4m) for LOT's European routes. These will replace its 21 Soviet-built Tupolevs.

By then, LOT will have nine Boeing 737s, three Boeing 767s and eight French ATR aircraft. The purchase of another "two or three 767s" was being considered, Mr Kilmaszewski said.

LOT's IL-62s were costing \$1.18m (\$336,000) a month in losses to fly and maintain. Chances of selling these air-

craft were "diminishing anywhere and anytime".

But LOT was talking to the Soviet Airlinesport about a barter deal involving the ILs or it was hoped they could be leased to airlines set up by the newly-independent Baltic states.

Robert Gibbons reports from Montreal: Comair, a US feeder airline 23 per cent owned by Delta Air Lines, has placed a firm order worth \$395m (\$203.6m) with Bombardier's Canadair aerospace group for 20 Regional Jets.

Comair has taken options on a further 20 of the 50 passenger aircraft. Part of the fuselage of the Regional Jets is made by Short Brothers in Belfast, a Bombardier subsidiary. Excluding the options, the Comair order will bring Bombardier's total aerospace order backlog to nearly \$650m. The Regional Jet is going through the certification process. First deliveries begin next year to a Lufthansa feeder line.

## Japan reviews insurance on exports to Iran

JAPAN'S Ministry of International Trade and Industry (MitI) is reviewing requests for insurance on Japanese exports to Iran, but has yet to give its approval for any submitted thus far, a MitI official said yesterday, AP-JP reports from Tokyo.

The official was responding to a report in the Iranian press on Saturday that the Japanese government had agreed to insure Iran-bound exports, starting in late November.

"We're looking at the requests on a case-by-case basis, but have reached no concrete decisions," he said. MitI has been considering applications for insurance since the beginning of this year because of Iran's impartial stance during the Persian Gulf crisis, he added.

Japan had refused to consider extending credit and insurance for exports bound for Iran ever since that country's fundamentalist revolution in 1979.

## US in China market access talks

MR Joseph Massey, US assistant trade representative, arrived in Beijing yesterday for talks this week on market access and protection of intellectual property rights, two crucial issues which have angered Washington, agencies report from Beijing.

Mr Massey's talks, which were due to last from yesterday until Friday, will be with China's ministry of foreign economic relations and trade. This is the organisation that is trying to protect billions of dollars-worth of exports from possible punitive sanctions.

The talks will be one of the last sessions before the November 26 deadline for another investigation. This inquiry concerns China's protection of copyrights and patents.

On Sunday, the China Daily newspaper quoted Qin Aunan, deputy director of the National Copyright Administration, as saying China would join the Berne Convention and the Universal Copyright Convention, on the basis of the existing Chinese copyright law.

Such a step would occur "at an unspecified date, but well before the end of next year".

China's first copyright law came into effect on June 1 but Beijing has come under fierce international pressure to improve its record on intellectual property rights. A lot of this pressure has emanated from the US.

This week's negotiations will be the first in Beijing since the Bush administration launched a year-long trade inquiry on October 10 to investigate allegations that Beijing restricts US exporters' access to China's markets, or even denies such access altogether.

If after the investigations, the US decides to retaliate against China, it could impose tariffs of up to 100 per cent on some of China's exports to the US, in order to compensate for alleged losses.

The duties could eat into China's profitable trade with the US, which is growing larger and is itself an issue of concern and anger for many US legislators.

Washington says China exported \$5.9bn (\$3.43bn) more to the US than it imported in the first seven months of 1991. This would represent a jump of 13.5 per cent in its surplus compared with that at the same time a year ago.

China had a surplus of \$10bn with the US for all of 1990, Washington says.

But Beijing disputes the figures, saying it buys more from the US than it sells.

Beijing has reacted angrily to the US position. After the latest investigation was launched, a Beijing government spokesman said: "We feel strong dissatisfaction at the United States' unilateral investigation... We absolutely cannot accept the accusations."

Beijing maintains that it has done a lot to open its markets and protect intellectual property rights already.

These steps include implementing a new copyright law, offering to join international copyright pacts, and proposing a number of market-opening measures.



## UK NEWS

## Lonrho fails to win court backing on Fayed case

By Robert Rice,  
Legal Correspondent

LONRHO, the international trading conglomerate, yesterday lost the latest round of its legal battle to wrest control of House of Fraser store group from the Fayed brothers.

The High Court in London decided the government had not acted unlawfully in failing to seek the disqualification of the stores group's owners as company directors.

The court also said Mr Nicholas Ridley, the former trade secretary, had not acted perversely or unreasonably when he refused to seek disqualification of the Fayed brothers in 1990, in spite of a Department of Trade and Industry inspectors' report which concluded that they had lied during their 2515m takeover of the group in 1985.

Lonrho also wanted the court to order Mr Peter Lilley, the current trade and industry secretary, to reconsider Mr Ridley's decision and take action against the Fayed brothers.

Lord Justice Neill said the court was limited to ruling whether or not Mr Ridley had arrived at a decision which no reasonable secretary of state could have made on the evidence before him.

He had properly taken account of the allegations in the report. He had set against that the fact that the aim of the 1986 Act was not to punish individuals but to protect the interests of the public and shareholders.

No former House of Fraser shareholders had suffered as a result of the 1985 takeover, and since then the Fayed brothers had conducted their business in a law abiding, proper and regular manner.

The DTI report had concluded that the Fayed brothers dishonestly misrepresented their origins, wealth, business interests and resources to the Secretary of State, the Office of Fair Trading, the press, the House of Fraser board, the company's shareholders and their own advisers.

Lonrho, which has several legal actions pending against the Fayed brothers and the House of Fraser, owners of Harrods, the luxury goods store, is considering an appeal.

## Major attacks intervention by Ripa di Meana

By Alison Smith in London, Robert Mauthner in Harare, and Andrew Hill in Brussels

THE political row over the European Commission's intervention in environmental studies for seven construction projects in the UK flared again yesterday.

Mr John Major, Britain's prime minister, wrote to Mr Jacques Delors, the Commission president, expressing "severe irritation" at the way the matter had been handled.

Mr Major made clear his annoyance at the personal letter sent last week from Mr Carlo Ripa di Meana, the environment commissioner, to Mr Malcolm Rifkind, the UK transport secretary, suggesting that work should be stopped until differences about environmental impact studies had been settled. Mr Major, in Zimbabwe for the Commonwealth conference, described the intervention as "astonishing".

Having called for a full report on the affair over the weekend, he commented yesterday that the UK had had no prior notice of the move, and that this was not the first time it had happened. "It seems to me to be on the basis of ill-founded reports and not facts. It is also on the basis of reports that were not discussed with the United Kingdom. It seems

to me to be absolutely how the European Commission ought not to behave and I have told them so."

Mr Delors is understood to be angry that Mr Ripa di Meana decided to publicise his personal letter to Mr Rifkind. Mr Ripa di Meana sent his press release on the infringement procedure direct to journalists.

His letter said that the UK failed to follow EC procedures on the environmental impact of the work which includes the high-speed rail link from the Channel tunnel to King's Cross station in London, and the East London River Crossing.

The UK government and the Commission are acutely conscious that the intervention comes at the sensitive period of the run-up to the Maastricht summit on economic and political union, and are anxious to minimise its impact on the broader discussions.

Mr Rifkind is preparing a detailed response, and department of transport officials remain confident of the success of their explanation that the schemes were approved under UK procedures which include an environmental assessment equivalent to EC standards.

## Former BCCI auditor to co-operate with inquiry

PRICE WATERHOUSE, the former auditor of the Bank of Credit and Commerce International (BCCI), was yesterday given leave by the High Court to provide confidential information about its former client to the inquiry into the collapse of the bank.

The inquiry, chaired by Lord Justice Bingham, was set up by the Chancellor of the Exchequer and the Bank of England last July to inquire into the supervision of BCCI and to consider whether action taken by the UK authorities was appropriate and timely.

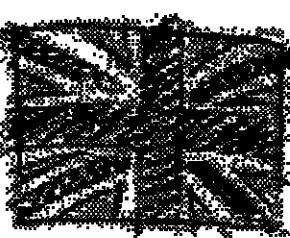
It is a non-statutory inquiry without power to compel wit-

nesses to give evidence or produce documents. It will sit in private but its findings will be made public.

Mr Justice Millett granted Price Waterhouse a declaration that neither obligations of confidence to BCCI nor its professional privilege precluded them from supplying documents or information specifically requested by the inquiry.

Mr Douglas Hogg, the junior foreign office minister, will visit the United Arab Emirates at the end of this month. Discussions are expected to include the BCCI collapse.

## BRITAIN IN BRIEF



### Deadline set for cable TV companies

The government has delivered an ultimatum to cable television companies which have not so far raised the necessary finance to start operations.

Mr Peter Lilley, the trade and industry secretary set a three month deadline for companies holding 13 cable television franchises but which have not yet been awarded the necessary telecommunications licences to operate a service.

Mr Lilley said 13 other franchises remained unlicensed and stuck on the starting blocks. "I have therefore decided to challenge the holders of these 13 franchises. Either come up with the evidence of financial commitment that by department requires - by law - in order to issue a Telecommunications Act licence or clear the fields for others to do so," Mr Lilley told the Cable Convention in London.

The cable companies involved include Comnet Cable, a subsidiary of US Cable Corp, which has faced difficulties raising money for franchises covering six towns in England.

### Few students take loans

Less than a third of students took a government "top up" loan last year, and administrative costs for the loan scheme amounted to almost 20 per cent of the total lent, according to the first annual report of the student loan company.

The government-owned Student Loans Company lent some £70m to 180,000 students in the 1990/91 academic year - 28 per cent of the student population. The average loan was £388.

Administrative costs amounted to £13m - £48 per loan.

### Seelig defends reputation

Mr Roger Seelig had no need to win another takeover bid to boost his reputation in the City at the time of the 1986 battle for Distillers, his former secretary told a London court. Mr Seelig, then corporate finance director at Morgan Grenfell, Guinness's principal merchant bank during the bid, had already established his reputation, said Miss Mary Stanford.

Cross-examined by Mr Seelig she agreed that in early 1986 his workload, apart from the Distillers bid, included the merger of Habitat/Mothercare and British Home Stores, the Stock Exchange listing of Virgin, the sale of Our Price to W.H. Smith and P&O's purchase of European Ferries.

Mr Seelig and Lord Spens, former corporate finance managing director at the Henry Ansbacher merchant bank, are jointly charged with conspiring to contravene the 1958 Prevention of Fraud (Investments) Act. Mr Seelig faces another charge under that act and two of false accounting. Lord Spens faces one false accounting charge. Both pleaded not guilty.

### Extension for MMC report

The Monopolies and Mergers Commission (MMC) has been granted a second extension, until December 20, to complete its investigation into whether the structure of new car parts suppliers in the UK is anti-competitive.

The car parts inquiry has been running in parallel with a more wide-ranging probe into new car prices and whether they are influenced by the system of exclusively franchised car dealers.

The greater urgency and complexity of the inquiry into car prices and distribution is understood to have been mainly responsible for the extra time needed to complete the parts investigation.

### Conoco makes oil find

Conoco, the US oil company, said it found oil in block 29/2a in the North Sea, 150 miles east of Aberdeen. The well found oil flowing at an average rate of 9,000 barrels a day and another well is planned to appraise the discovery.

### Treasury to alter tax rules

The Treasury said it will demand that Britain's 1,600 largest companies speed up payments of value added tax (VAT) by January 1993. The move enables the government to avoid an increase in its borrowings in order to comply with European Community rules on tax.

To avoid increasing the Public Sector Borrowing Requirement (PSBR), the largest businesses will have to begin making VAT payments monthly, instead of quarterly, as is now the case. The move could send hundreds of companies scrambling to find the cash to pay their tax payments more quickly.

If the payments are not speeded up, the effects of EC tax harmonisation would cause a one-off increase in the PSBR of an estimated £2bn for the 1992-93 fiscal year.

Currently, all businesses pay VAT quarterly on domestically produced goods and VAT on imported items at the time of importation.

### Two held over BCCI evidence

A member of the Serious Fraud Office team investigating the collapsed Bank of Credit and Commerce International (BCCI) has been remanded in custody on charges of conspiring to destroy or steal documentary evidence relating to potential fraud trials.

Mr Mark Barley, a trainee accountant with Coopers and Lybrand, was remanded in custody for a week at a London court. Mr Barley is jointly charged with Mr Bernard Lynch, a freelance accountant. He was also remanded in custody.

Both men were charged that on or before October 19, they conspired to pervert the course of justice by removing, destroying or defacing documentary evidence relating to fraud trials resulting from the collapse of BCCI in July.

Mr Barley was one of 11 accountants seconded from Coopers and Lybrand to work on the investigation. He joined the team four weeks ago.

### Receivers at Slumberdown

Slumberdown Group, the Scottish-based duvet, quilt and pillow manufacturer, has gone into administrative receivership after cutbacks failed to stem its losses.

The jobs of 150 employees working in Hawick, in the Scottish borders, are under threat although the receivers are hopeful of selling the business as a going concern.

### Government health pledge

Mr William Waldegrave, the health secretary, gave a categorical undertaking that any attempts to introduce new charges for National Health Service patients were illegal and would be stamped out. His assurance came during an impassioned Commons debate that again pitted Labour charges of "creeping privatisation" of the NHS against Tory claims that the opposition has no alternative reform.



### Royal Opera cancels performances amid pay dispute

THE ROYAL Opera House (ROH) in London has cancelled performances "for the foreseeable future" as a dispute with musicians over pay escalated. Management made the decision after members of the 120-strong orchestra stayed away from a final dress rehearsal of Meyerbeer's Les Huguenots. They had been requested not to turn up unless they were prepared to "work normally." The Musicians' Union, however, said its members had been staging only limited action because they did not want to jeopardise productions. Mr Robert Troy, a violinist in the orchestra and a Musicians' Union steward, said comparable orchestras in other European capitals were either paid more or were not required, as were ROH orchestra members, to provide their own instruments.

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## UK NEWS

## Labour protest over Unisys jobless scheme

By Michael Skapinker

MR ROBIN COOK, a leading opposition Labour party spokesman, has protested to Unisys, the US computer manufacturer, over plans to halve the redundancy payments of employees from the company's plant at Livingston, Scotland, if they leave for another job before the plant closes next February.

Unisys said earlier this month it would close the factory with the loss of 696 jobs as part of a programme of reducing the worldwide workforce by 10,000.

In a letter to Mr Jim Unruh, Unisys's president, Mr Cook, who is the MP for the nearby town of Livingston, said it was unfair to penalise staff who managed to find alternative employment.

"Given the rising unemployment in Britain they would be foolish not to take the chance of a job if they were offered it," Mr Cook said.

Unisys is offering employees under 40 years old two weeks redundancy payment for each year of service and two and a half years for those over 40.

Unisys has engaged Coutts, an employment consultancy, to help employees from the factory find new jobs. Mr Cook said in his letter: "It does appear perverse that the company should ... be penalising financially those staff who are successfully placed by the agency hired by the company."

Mr Cook added that employees at the Livingston plant suspected that their factory, which makes cheque-processing equipment, receipt printers and credit card reading devices had been singled out for closure because redundancy payments required by UK law were less generous than those in France, where the company has other factories.

Unisys denied the decision to close the Livingston plant was affected by the level of redundancy payment required by law. The closure was based on a consideration of the demand for products made at its various factories, the company said. Unisys confirmed that employees who left before the factory closed would lose half their redundancy payments.

## Opposition pledges private loans for BR

By Richard Tomkins, Transport Correspondent

THE Labour party will allow British Rail (BR), the state railway, to fund the acquisition of badly needed commuter trains with private-sector finance if the opposition wins the general election.

Mr John Prescott, the party's transport spokesman, will tell a conference on railway finance today that a Labour government would encourage BR to buy trains for Network SouthEast through sale-and-leaseback deals arranged through City banks.

The first routes to benefit would be the commuter railways between London and Kent, in south east England.

BR has won government approval for plans to replace the trains, but has had to postpone the later phases of the replacement programme because it has run out of money.

BR's powers to invest are at present constrained by tough Treasury rules which prevent it from obtaining finance from anywhere other than the government.

This is already common in Continental Europe. In France, for example, the state-owned railway buys its high-speed trains from the manufacturer, then sells them to banks and leases them back.

The government says laxer financial strictures for Continental railways have led to the accumulation of massive debts requiring periodic write-offs at the taxpayer's expense.

## Retail sales remain at low levels despite interest rate cut

By Rachel Johnson, Economics Staff

RETAIL SALES volumes have stuck at low levels despite the cut in UK interest rates at the beginning of September, according to figures which hit shares and the pound yesterday.

Provisional estimates from the Central Statistical Office (CSO) revealed that September sales volumes failed to rise above August's depressed levels. They were lower than in July, when bad weather boosted retail spending and government hopes of an "economic spring".

The latest figures dispirited traders on London's stock and currency mar-

kets after a moderately heartening distributive trades survey from the Confederation of British Industry, the employers organisation, yesterday.

Retailers, meanwhile, had reported higher annual sales in September for the second month running.

The retail sales data reinforced the nervousness roused by a weekend opinion poll putting the opposition Labour party seven percentage points ahead of the Conservatives.

The pound lost ground to close at DM2.9050 after Friday's DM2.9125, limiting the chancellor of the exchequer's

scope in next month's Autumn Statement for cutting interest rates or raising public spending to speed up the economy.

Sterling cannot sink below its DM2.8625 floor in the European exchange rate mechanism.

Though the amount of goods sold last month was 0.7 per cent down on the same month a year ago, an assessment of sales over the last two quarters shows the trend has begun gently to rise.

According to the less volatile three-monthly comparisons, sales volumes

in July to September were 0.6 per cent up on the previous three months, but still half a per cent lower than the same three months a year earlier.

The Treasury pointed out that this was the first complete set of economic data for the third quarter, and could point to a rise in gross domestic product during this period. Consumer spending counts for about two-thirds of gross domestic product.

Additionally, the Retail Consortium, the umbrella body for the retailing industry, said September was a "small but encouraging improve-

ment" because volumes were static after August's fall.

It supported the CSO's picture of retailing which showed no upturn yet but no worsening in trading conditions.

Mr Steven Bell, economist at Morgan Grenfell, said that he was confident volumes would soon pick up as the savings ratio - the proportion of income saved not spent - had stabilised at around 10 per cent.

"It will start to fall and shortly lead to a pick-up in consumption necessary for recovery," he predicted.

## UK manufacturing faces 10-year challenge to compete

By Michael Cassell, Business Correspondent

BRITAIN'S manufacturing industries have made big strides over the last decade but they still face a 10-year struggle to catch up with overseas competitors, according to the Confederation of British Industry (CBI).

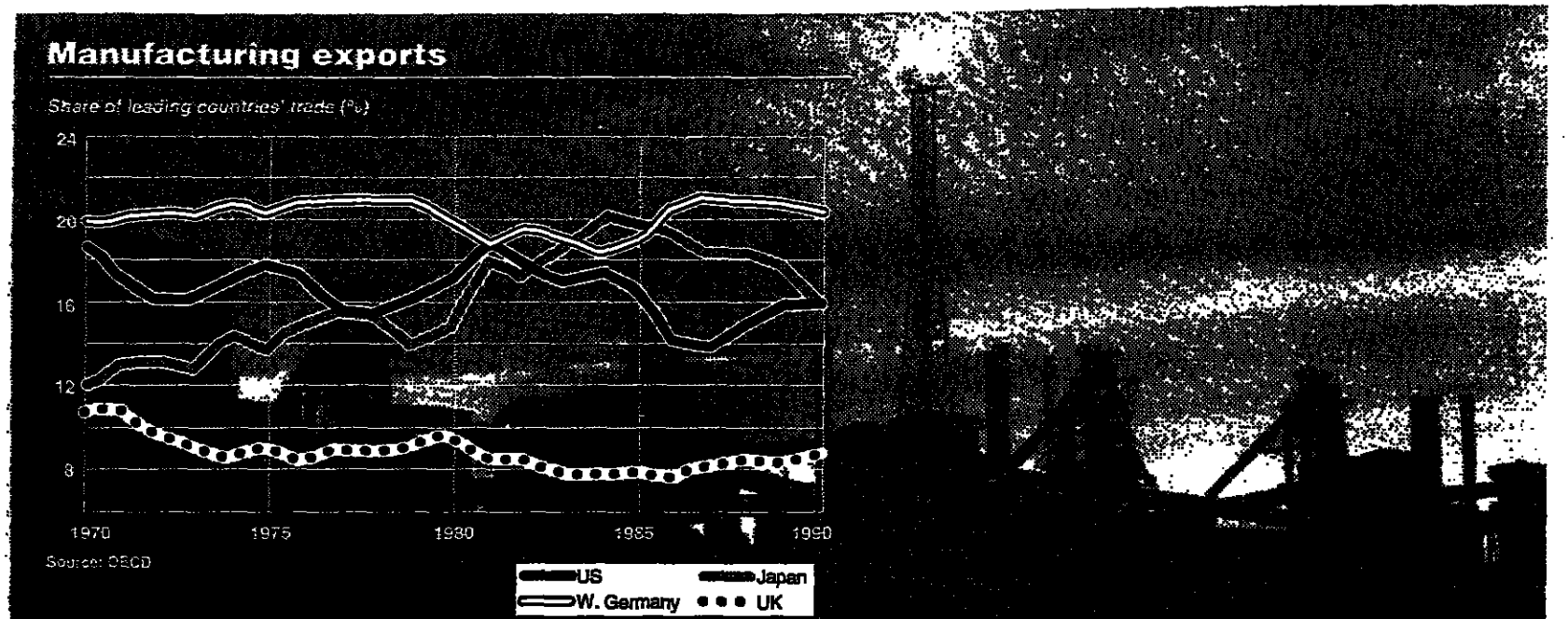
Yesterday's report from the manufacturing advisory group of the CBI, the employers' organisation, gives credit to Britain's manufacturing achievements over recent years. But, simultaneously, it dashes any lingering complacency by emphasising the yawning gap which still separates the UK from what the employers' organisation calls "the world's best".

The report stresses that UK manufacturing output is running 25 per cent above the level recorded 10 years ago. Manufacturing now employs 10m people directly or indirectly, which contributes more than £100bn to the country's gross domestic product.

The UK's share of manufactured exports is, after decades of decline, rising again and while growth in manufacturing output is close to the average for industrialised countries productivity has increased more rapidly than every country except Japan since 1980.

Major factors in the improved performance include increased emphasis on quality, training and innovation - areas where UK companies have traditionally lagged behind. Improved employee relations and a growing army of small manufacturing companies - increasing at the rate of 100 a week in the last ten years - have also contributed to a better manufacturing effort.

Even so, the CBI says Britain's manufacturing com-



petitors still have better equipment, better trained personnel and a more productive relationship with owners and governments.

It emphasises that UK manufacturing productivity is still 30 per cent lower than in West Germany, 35 per cent below Japan and around 45 per cent below the United States.

Ending the productivity gap with West Germany by the end of the century will, for example, require UK productivity growth to exceed German performance by 3.5 per cent each year. This implies growth of up to 6 per cent annually, compared with an average 4 per cent between 1985 and 1990.

The recession, according to the CBI report, has made mat-

ters significantly worse in the short-term, with a higher proportion of manufacturers working below capacity than at any time since 1983. Competitiveness has also been undermined by a large drop in fixed investment in manufacturing - likely to be 22 per cent lower than in 1988.

In calling for "a fundamental shift in attitudes at all levels", however, the CBI also addresses the longer-term weaknesses afflicting the manufacturing sector and apporions blame between companies, banks and government.

The CBI criticises the wide variation in productivity between the best and worst manufacturing companies and calls for the universal adoption

of "best practice" management techniques aimed at beating the productivity performances achieved in Japan and the US.

It wants better training, the spread of an "innovation culture" and improved relationships between customers and suppliers.

The CBI also gives high priority to the need for a more supportive approach from government. It says the Department of Trade and Industry often appears ineffective in promoting the interests of manufacturing in Whitehall and suggests it should play a greater role in formulating any government policy with a direct bearing on manufacturing competitiveness.

The report calls on the gov-

ernment to lower the burden of business taxation in order to encourage manufacturing investment. The CBI points out that the taxation of corporate profit rose steadily during the 1980s and is higher than the European Community average.

The British financial sector, meanwhile, is compared unfavourably with those of some competitor nations and the report says the financial systems in Japan and Germany have supported the development of manufacturing industry much more positively by providing consistent, long-term support.

Although the report discounts a radical restructuring of the UK financial system, it calls for "a more balanced rela-

tionship" between banks and smaller companies and the creation of local investment companies which would serve small businesses. Lending institutions, it suggests, should move away from lending to businesses on the basis of security on property and advance funds on the strength of individual business propositions.

The report welcomes the prospect of low and stable inflation and adds: "The economy is at a turning point. Either we return to the 'boom and bust' cycle which has plagued British manufacturers seemingly forever, or we invest in our manufacturing base. There is no middle way". Editorial comment, Page 20; Lex, Page 22

## THE STORY OF THE TRANS-MISSION THAT TALKS WITH THE ENGINE.

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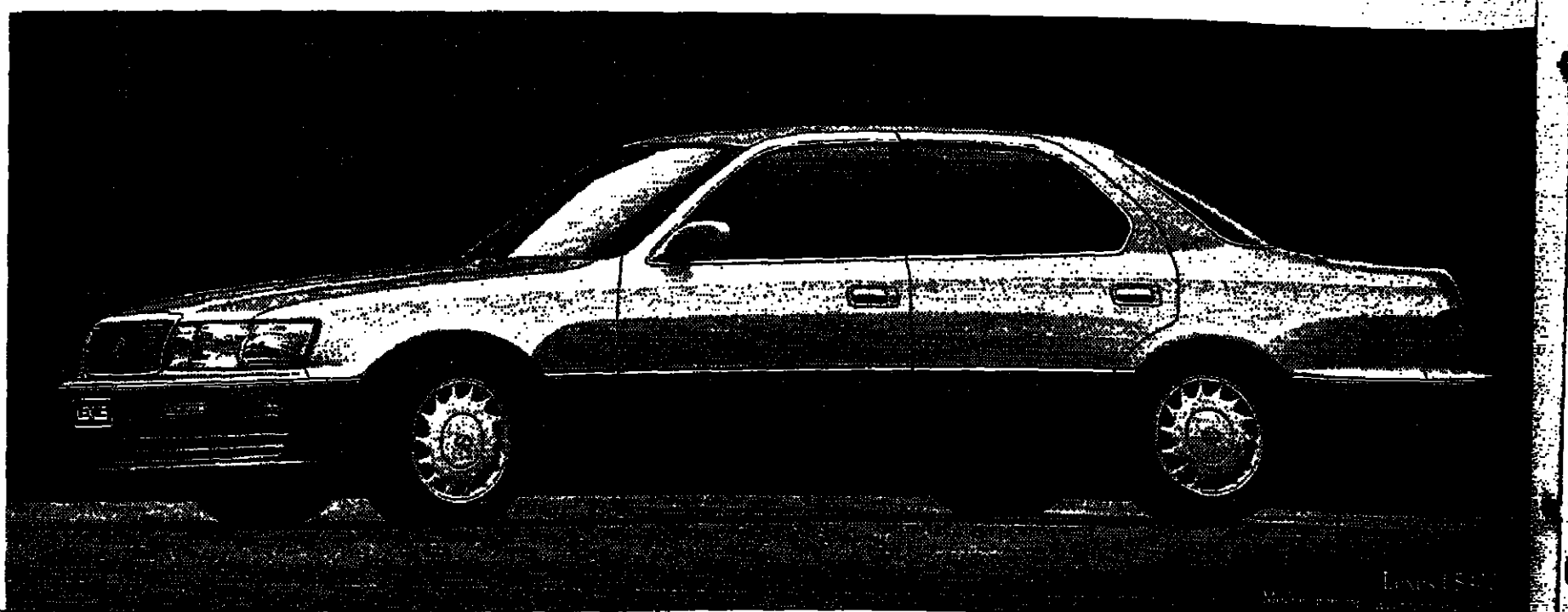
The new V8 engine, however, is only one example of the Lexus engineering

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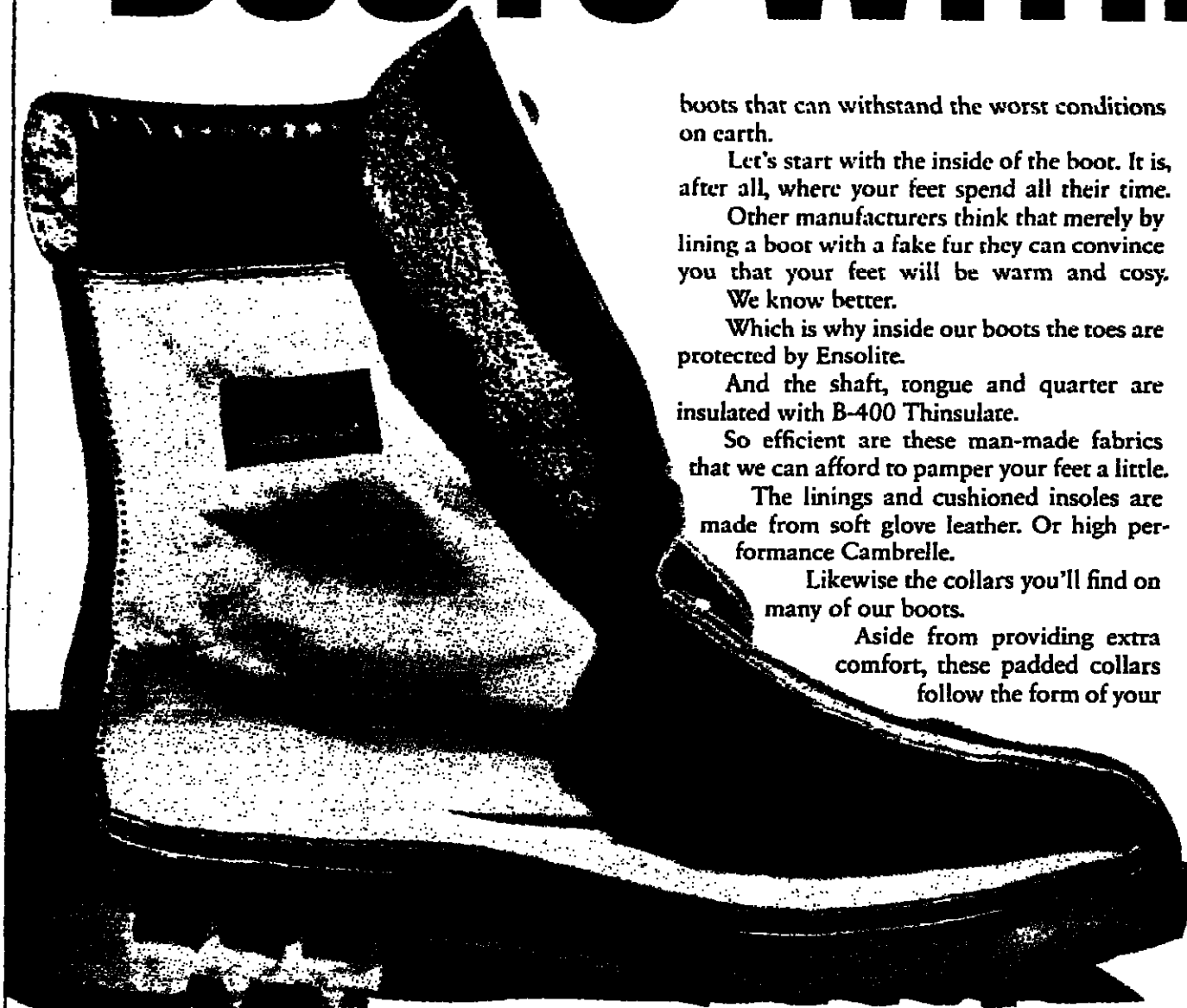
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We use every material known to man (and some known only to Timberland) to build

ankle to help stop the elements sneaking in.

Keeping the cold air out and the hot air in could have the effect of 'cooking' your feet.

To prevent this, we often drop in a bootie made from Gore-Tex.

This remarkable man-made fibre has 9 billion pores per square inch, each one 20,000 times smaller than a raindrop but 700 times larger than a molecule of perspiration.

As a result, our boots get an extra layer of waterproofing and your feet can breathe more easily.

Even so, any foot couped up in one of our boots is bound to sweat a little.

So to absorb any perspiration, some of our boots are fitted with a special removable polypropylene insole.

Perhaps because Timberlands come from the rainy State of New Hampshire, we set a lot of store by things that keep feet dry.

For example, all the important seams on our boots are stitched using no less than four rows of nylon stitching. We then tape seal them with latex to make sure that whatever

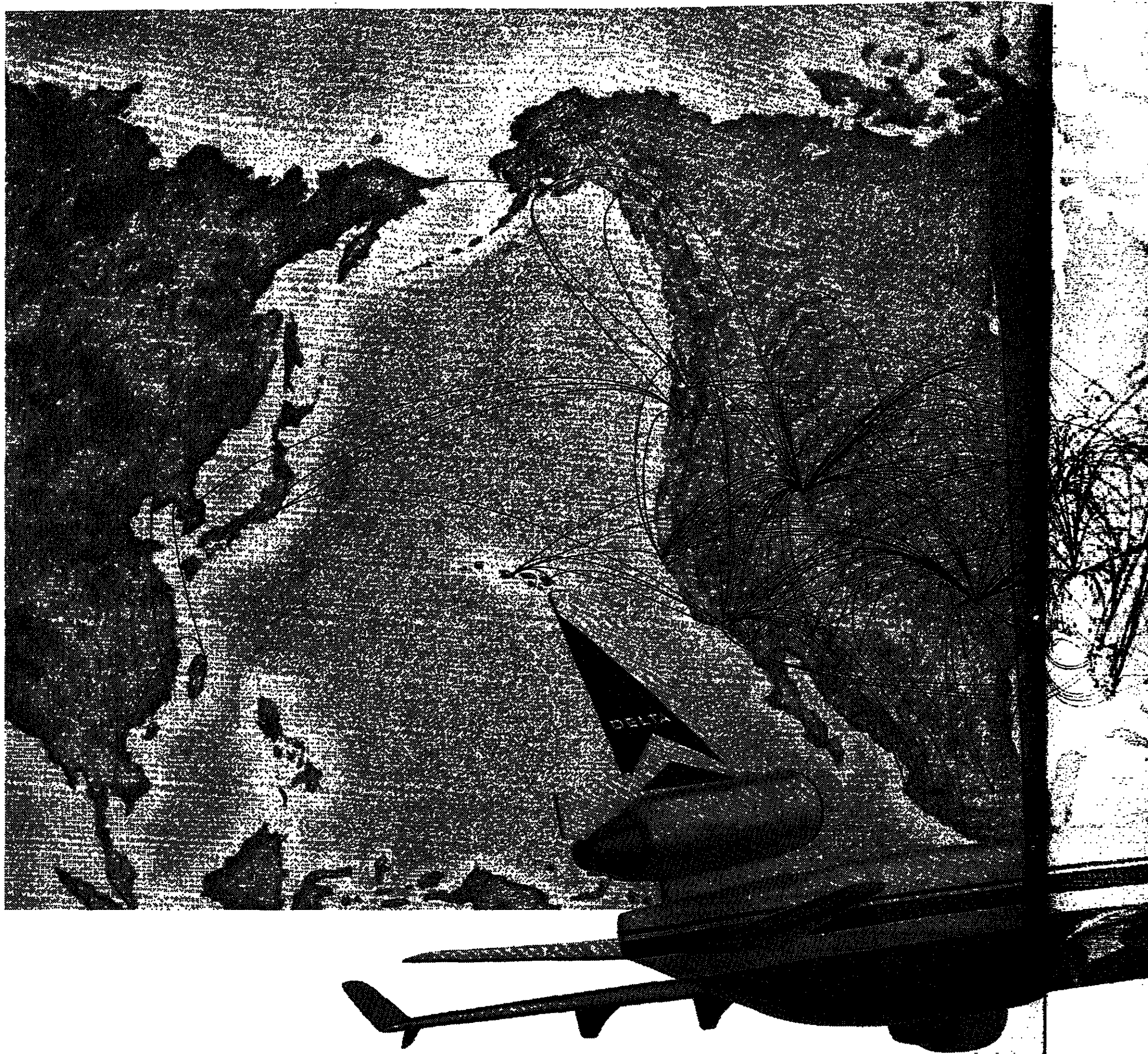
THIS INSIDE of a boot is hardly the most promising of subjects. But this advertisement got you into it. Notice also how effortlessly it dispels our assumption that feet are better off in fur. This is what the written word can do. It builds bridges between products and people. Gets the message over fast and effectively. Timberland shoes used to be cultish. One newspaper campaign later, their name is on everyone's feet. Take a big step forward. Advertise in the newspapers.

**PEOPLE  
READ  
NEWS-  
PAPERS**

This advertisement was placed by the Newspaper Publishers Association.



# Welcome to the new world De



From left, Delta Flight Attendant Bonita Caringola, First Officer Timothy Therrell, Captain Larry Bacon and Flight Attendant Stephanie Allen.

On November 1, the world will become smaller, and the atmosphere warmer as Delta Air Lines begins greatly expanded operations across Europe, the Middle East and Asia.

With new transatlantic nonstops

and the establishment of a European hub in Frankfurt, Delta will begin flying from Austria, Belgium, Czechoslovakia, Finland, Greece, Hungary, India, Israel, Italy, Norway, Poland, Portugal, Romania, the Soviet Union,

Sweden, Switzerland and Turkey.

All in addition to our existing service from England, Ireland, France, Germany, Denmark and the Netherlands.

Wherever we fly, Delta is dedicated to bringing travellers the best service in the sky. Service that's more convenient, and gives you more travel choices.

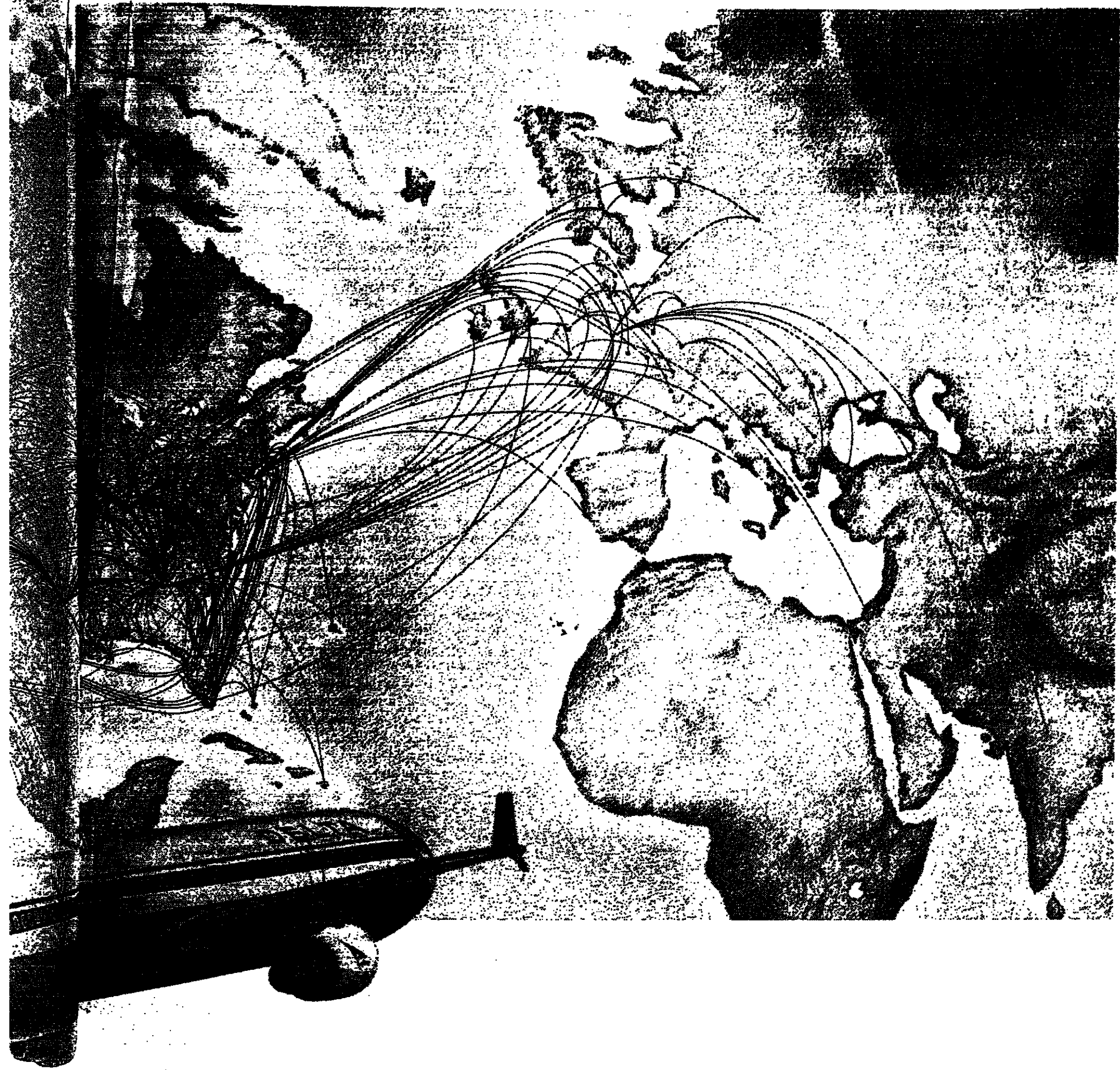
Tendered with the special warmth and professionalism the people of Delta are known for.

مكة من الأصل



هكذا من الأول

Only of Delta.



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land, Ireland  
Denmark and  
fly. Delta is  
ging travellers  
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fessionals  
are known for

**First across the U.S.A.,  
first around the world.**

With Delta, you enjoy the convenience of flying to any of over 240 U.S. destinations with one ticket, on one airline system.

And you enjoy more travel choices, because the Delta network serves more cities within the U.S. than any other airline. In fact, Delta's system is first in flights worldwide, with more than 4800 flights a day to over 300 cities in 33 countries around the globe.

**A few other firsts.**

As important as schedule and convenience are to travellers, they're just part of the reason for you to choose to fly with us.

Delta has the youngest and most modern commercial aviation fleet of its size in the world. As well as one of the most generous

frequent flyer programs. And our emphasis on service has earned Delta the best record of passenger satisfaction among major U.S. airlines for 17 straight years.\*

Have your Travel Agent book you on Delta. Or call us direct. And let us welcome you to Delta's world.

 **DELTA AIR LINES**  
*•We Love To Fly And It Shows•*

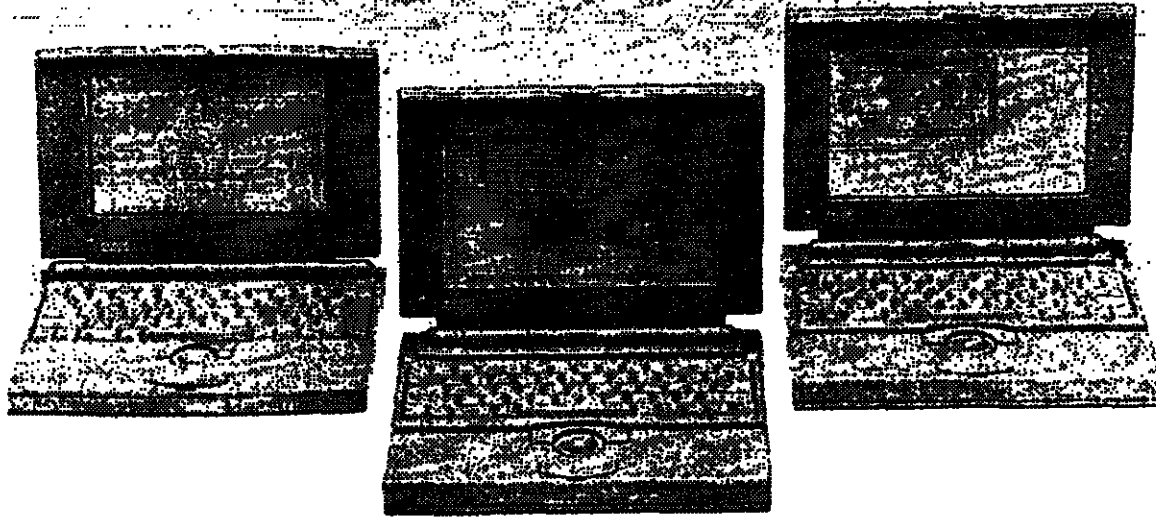
New routes subject to government approval. Start date of service may vary from November 1-5. \*Based on consumer complaint statistics compiled by the U.S. Department of Transportation. © Delta Air Lines, 1991.



## TECHNOLOGY

Louise Kehoe examines the US computer company's bid to become the market leader in notebook PCs

## Three new Apples fall from the tree



Apple's new crop of computers (left to right): the PowerBook 100, PowerBook 170 and PowerBook 140

The portable computer market is "a natural for Apple Computer," claims John Sculley, Apple chairman and chief executive. With the introduction yesterday of three "Macintosh PowerBook" notebook computers, Apple has spearheaded an ambitious bid to become the notebook personal computer market leader.

"We are not saying that we are going to get there in a year, it may take us a while, but that is the objective that we have set," Sculley says. Apple's Macintosh technology, with its graphical user interface and ease-of-use features, is particularly well suited to the portable computer sector, he maintains. "If there was ever a product where ease of use should be a great advantage, it must be in the computer that you carry around with you."

Apple faces formidable competition, however, as a late entrant into an already crowded market dominated by manufacturers of IBM-compatible notebook computers such as Compaq Computer and Toshiba. International Business Machines has also introduced a notebook computer and as many as a dozen other computer manufacturers are expected to weigh into the notebook sector before the end of the year.

Notebook computers represent one of the fastest growing segments of the computer industry, with worldwide sales expected to top 4m units this year, up from less than 3m in 1990, and reach nearly 8m units by 1994. By the mid-1990s, portable computers may account for as much as 50 per cent of the personal computer market according to market analysts.

Prices, however, have tumbled over the past year and discounting is widespread, reflecting generally sluggish market conditions that have prompted personal computer manufacturers to try to boost sales of portable models to make up for slowing shipments of their desktop products.

"We knew when we started developing the PowerBooks that if we were going to do more than catch up, and really kick into the notebook market, we would have to be able to compete on price," says Sculley. "From the very beginning we designed these products so that we could sell at very aggressive prices and still make money."

US list prices for the Macintosh PowerBooks range from \$2,300 for a model 100 with 2Mbytes of memory and a 20 Mbyte hard disc drive to \$4,600 for the top of the line model 170 with 4Mbytes of memory and a 40 Mbyte hard disc drive.

Sculley maintains, however, that the Macintosh PowerBooks incorporate different features from previous Apple products. "Because we are the only personal computer company that does hardware and software designs we can really make both complement each other, and we have probably never done a better job than we have with the PowerBooks," he claims. The PowerBooks incorporate the

same graphical user interface as desktop Macintosh models, and can run all Macintosh applications programs. Adapting the Macintosh technology to portable computers posed significant design challenges, however.

The computer "mouse", used with Macintosh computers to control movement of the pointer on the computer screen, has been replaced with a built-in "trackball", centred below the keyboard, which - with some practice - can be manipulated with the thumb without lifting the fingers off the keyboard.

With its PowerBooks Apple has introduced an innovative keyboard design with an integral palm rest. The keyboard occupies the back half of the unit, rather than being at the front as in most portable computer designs.

Apple consulted with several ergonomic and medical experts on the keyboard design and the company believes that it has come up with a design that is more comfortable and enables users to keep their wrists in a "neutral" position, avoiding the flexion that some studies have identified as a risk factor in the development of repetitive strain injuries.

In addition, the Apple designers say that the palm rests incorporated in

the PowerBook keyboard facilitate "micro pauses", resting the hand during periods of typing that reduce stress on the user's hands, arms, shoulders and neck. Even when perched on the lap, or set in the confines of an airline seat, the PowerBook can be used without cramping the fingers over the key-

**The failure of the Macintosh Portable was 'like a good cold shower' that awakened Apple to the need to accelerate its product development efforts**

board in an awkward position.

The weight and size of the Apple notebooks is comparable with that of competing products. The smallest version of the PowerBook, the model 100, weighs in at 5.1 pounds, equipped with 2Mbytes of internal memory and a 20 Mbyte hard disc drive. But the model 100 lacks a built-in floppy disc drive, and an internal modem is an optional extra.

The model 140 has a built-in floppy drive as well as either a 20 Mbyte or 40 Mbyte hard disc drive. It also has a slightly bigger screen, and weighs 6.3 pounds. It will be priced in the US at \$2,900 to \$3,500 depending upon memory and drive configurations.

The top-of-the-line model 170 features an active matrix display, which gives improved contrast and a broader viewing angle than the liquid crystal displays used in the lower-priced models.

It comes fully loaded with 4Mbytes of memory, a floppy drive, a 40 Mbyte hard drive and an internal modem for \$4,600.

By launching three notebook models at once, Apple has demonstrated its determination to become a major participant in the portable computer market. If Apple is successful, however, it will be a case of "third time lucky".

Apple's first effort to produce a portable computer was in the early 1980s, when it produced a carry-along version of the Apple II. Eventually, Apple introduced the Apple IIc, a compact desktop model that lacked an integral display unit.

The "Macintosh Portable" announced two years ago was supposed to launch Apple into the laptop

computer market, but its weight and bulk proved unpopular.

A high price tag, in part due to the incorporation of leading edge display technology, was its downfall. Apple this week officially withdrew the product.

The failure of the Macintosh Portable was "like a good cold shower" that awakened Apple to the need to accelerate its product development efforts, "to get products out faster and at much lower cost," says Sculley.

Eighteen months ago, Sculley took charge of Apple's product development himself and adopted the title of chief technical officer. One of his first decisions was to seek outside help from Sony, a long-time supplier to Apple of displays, disc drives and other components.

Sony is manufacturing the PowerBook 100 on Apple's behalf. The Japanese consumer electronics giant also played a leading role in the development of the Apple product. "It was a question of how many things we could undertake at one time," Sculley recalls. While Apple's own product development groups were focusing on the "start from scratch" projects of designing what were to become the PowerBook 140 and 170 models, Sculley saw the need for a lower-priced entry-level notebook model.

The Sony-Apple alliance, known within Apple as the Asahi project, began in June 1980 when Apple presented Sony with "a half-page specification" based upon the architecture of the Macintosh Portable.

Much give and take and many thousands of miles of travel later, Sony recently began manufacturing the PowerBook 100 at its plants in Japan and San Diego, California, last month.

The Apple-Sony alliance "is an indication that if Apple is going to expand its role in the personal computer market, to move out of the sandbox on to the beach, the company will have to have more partnerships with companies that we trust and respect," says Sculley.

He is, however, quick to refute suggestions that Apple's relationship with Sony may expand to become comparable with the company's recently announced alliances with IBM.

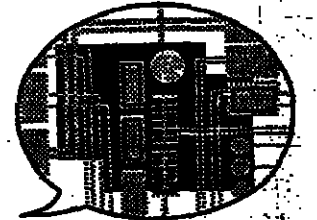
"We have a fine relationship with Sony, but the relationship with IBM is seminal, there will be nothing that compares with it in the 1990s," the Apple chairman stressed.

While Sony is helping Apple to achieve its immediate goal of staking a claim in the notebook computer sector, IBM has become Apple's strategic partner in a long-term bid to create the dominant personal computer architecture of the 1990s and beyond.

For Apple, however, the Macintosh PowerBooks are not just interim products. Apple recognises that it must quickly become a major force in the notebook computer market if it is to be capable of fully exploiting the opportunities that its new relationship with IBM promises.

## The missing link at CTCs

By Andrew Adonis



### TECHNICALLY SPEAKING

"A CITY Technology College is a technology-rich environment. The quality of teaching and learning in CTCs is greatly enhanced by the carefully planned use of technology, especially information technology, in all subjects."

So goes the blurb in the framework document for 15 CTCs, set up - or soon to be - under the initiative launched by Kenneth Baker when education secretary in 1988. CTCs were intended to be "beacons of excellence", with private-sector finance bringing high standards and a practical curriculum to Britain's beleaguered inner cities.

In reality, corporate donors have been notably mostly by their absence, with the taxpayer picking up most of the £135m tag for the existing and projected colleges. What about the technology?

CTCs are bound by the national curriculum, and offer much the same range of GCSEs and A-levels as other state schools - though with additions: Business and Technician Education Council vocational courses are on offer in most, and one offers the six-subject international baccalaureate as a broader-based alternative to A-levels.

Beyond that, however, CTCs are keen to stress their practical bias. CTC pupils have to take at least two technology-related subjects up to GCSE, and balanced science is compulsory. All CTCs have lavishly equipped technology facilities - so lavishly that there is not always space in the labs for pupils to perform more mundane tasks. Leigh CTC in Durdham, Kent, boasts that science and technology occupies half the curriculum, rising to 60 per cent as pupils progress through the college. Computer literacy is "a basic necessity", so is the "very latest" in IT.

"Our college-wide, IBM compatible, industry standard computer network, using Olivetti machines, introduces everything from word-processing to computer-aided design into every aspect of the curriculum," says Leigh's prospectus. In foreign languages, for example, pupils can watch or listen live to 35 TV and radio channels in several languages and use word processing and data-

base packages adapted to language courses.

It is not all science, videos and word processing, however. "Enrichment activities", to use the CTC jargon, are integral to the curriculum, and include employer placements, "citizenship", community service, physical education, clubs, art, and music. The last is taken more seriously than in many state schools these days: Hartsdasher's Aske's Hatcham CTC, in New Cross, offers free introductory courses of 10 lessons in the full range of instruments, and has some funds available for pupils showing promise but unable to pay for subsequent tuition. Most CTCs schedule enrichment activities for an hour after the end of lessons on a few days a week.

For one CTC which opened last month, the arts are the core curriculum. Britts, in Croydon, south London, is the first "City College for the Technology of the Arts". Catering ultimately for 750 14- to 18-year-olds, it concentrates on the technology of the performing arts - recording, broadcasting, lighting, choreography, theatre management, and so on. "We're not interested in people with masses of tap dancing certificates," says Colleen Rue, Britts's marketing director. "We want people with a keen interest in performance and technology." And they are expected to work hard at it: the school day extends from 8.30 am to 5 pm (1 pm on Fridays).

Are CTCs about to transform the national curriculum? Some of the principals would like to think so. But to date Her Majesty's Inspectorate has reported on only one CTC, Kingshurst in Solihull, and the inspectors were highly critical of its teaching in one area above all - technology.



# Treuhandanstalt

## Branch Frankfurt/Oder

### Second Tender for the sale of companies in the eastern region of BERLIN/GERMANY

Treuhandanstalt Branch Frankfurt/Oder herewith announces the tender for the sale of presently wholly owned companies in the region East of Berlin/Germany, between Berlin and Poland, as listed below (In brackets: type of business, present number of employees and real estate in 1000 square meters):

#### Civil engineering / Construction

Baulemente GmbH Möncheberg  
O-1272 Möncheberg  
(windows / 20 / 20)  
Bauhütte Schwedt GmbH  
O-1330 Schwedt  
(construction, reconstruction / 85 / 14)  
Baureparaturen Wenditz GmbH  
O-1292 Wenditz  
(civil engineering, construction / 12 / 20)  
Bauunternehmen Oder-Spreewerke  
Marketing und Bauver. GmbH  
O-1200 Frankfurt (Oder)  
(civil engineering, construction / 2007 / 840)  
Hochbau Frankfurt (Oder) GmbH  
- Bauunternehmen Oder-Spreewerke  
O-1200 Frankfurt (Oder)  
(construction / 777 / 364)  
Ingenieur- und Bau Eberswalde GmbH  
O-1300 Eberswalde-Finow  
(civil engineering, water engineering / 435 / 68)  
Kreiselbau GmbH Beeskow  
O-1230 Beeskow  
(civil engineering / 17 / 10)  
Märkische Bau AG  
O-1513 Wriezen  
(civil engineering, construction / 941 / 449)  
Märkische Gebäudetechnik GmbH  
O-1262 Hennickendorf  
(sanitary installation / 360 / 88)  
STREBEDT Ingenieurhochbau GmbH  
O-1300 Eberswalde-Finow  
(construction / 588 / 91)  
Templiner Tiefbau GmbH  
O-2090 Templin  
(civil engineering, construction material trade / 78 / 63)  
Tief-, Wasser- und Ozeanbau GmbH  
O-1310 Bad Freienwalde  
(civil and water engineering / 645 / 264)

#### Construction materials

Bad Freienwalder Feuerfest-Werke GmbH  
O-1310 Bad Freienwalde  
(fireproof ceramics / 279 / 14)  
Betonwaren- und Vertriebs GmbH  
O-1220 Eisenhüttenstadt  
(concrete stones / 86 / 134)  
Oder-Spreewerke Betonfertigteile GmbH  
- Bauunternehmen Oder-Spreewerke  
O-1220 Eisenhüttenstadt  
(concrete elements / 358 / 310)  
Architektur- und Ingenieur-Consult  
Eisenhüttenstadt GmbH  
O-1220 Eisenhüttenstadt  
(civil consulting engineers / 98 / 6)  
Ingenieurbüro Metallbau  
Eisenhüttenstadt GmbH  
O-1220 Eisenhüttenstadt  
(steel construction consulting / 77 / 0)  
Design-Frankfurter Werkstätten GmbH  
O-1200 Frankfurt (Oder)  
(advertising / 5 / 0)  
Dienstleistungs-GmbH  
O-1300 Eberswalde-Finow  
(electrical appliances trade / 193 / 24)  
G. Schwedt-Schuh-Wohnungs GmbH  
O-1330 Schwedt  
(housing administration / 5 / 0)  
Versorgungs- und Gemeinschafts-  
einrichtungen GmbH  
O-1200 Frankfurt (Oder)  
(heating power station, railroad center / 14 / 33)

#### Wood / Furniture

Märkische Holz GmbH  
O-1291 Neuhausen  
(interior wood installations / 89 / 16)  
Möbelwerke Frankfurt (Oder) GmbH  
O-1200 Frankfurt (Oder)  
(furniture / 463 / 63)  
Armaturenwerk Kietz GmbH  
O-1211 Kietz  
(brass pieces / 21 / 2)  
Blechpackungswerk Eberswalde / Britz GmbH  
O-1306 Britz  
(packaging / 4 / 87)  
CTA Apparaturen GmbH  
O-1240 Fürstenwalde  
(containers, tanks / 588 / 250)  
Fahrzeug und Maschinen GmbH  
O-1301 Lüdersdorf  
(agricultural machine maintenance / 29 / 23)  
Finow-Stahl GmbH  
O-1300 Eberswalde  
(steel and silv construction, steel ropes / 67 / 8)  
FORST maschinen-geräte-service GmbH  
O-1300 Eberswalde-Finow  
(forestry machines / 21 / 18)  
Mechanische Fertigungs- u. Vertriebs GmbH  
O-1301 Friedrichswalde  
(general metal working / 20 / 10)  
MeTec GmbH  
O-1251 Ahrensfelde  
(general metal working / 19 / 0)

#### Rationalisierungs- u. Maschinenbau

GmbH  
O-1200 Frankfurt (Oder)  
(general machine construction / 68 / 16)  
Fruchteln GmbH  
O-1291 Blumberg  
(eggs, poultry / 63 / 1023)  
Fürstenberger Fleischwaren GmbH  
O-1220 Eisenhüttenstadt  
(meat slaughtering and processing / 548 / 48)  
Mühlenerwerke Müllrose GmbH  
O-1203 Müllrose  
(grain mill / 90 / 67)  
Wriezen Getränke GmbH  
O-1313 Wriezen  
(softdrink trading / 43 / 4)  
Biesenhaler Mischfutter GmbH  
O-1296 Biesenhal  
(animal feed products / 92 / 39)  
Frankfurter Kraftfutterwerk-Ges. mbH  
O-1200 Frankfurt (Oder)  
(animal feed products / 42 / 12)  
Biomodelle GmbH Schönwalde  
O-1291 Schönwalde  
(breeding of laboratory animals / 27 / 31)  
Elektromechanik Lychen GmbH  
O-2093 Lychen  
(electrical motors / 101 / 23)  
Prenzlauer Glasverarbeitung GmbH  
O-2130 Prenzlau  
(window glass construction / 16 / 3)

#### Tender conditions:

- Everybody is entitled to bid. Bids are to be for the total share capital of the company. All offered companies are in the legal form of a limited liability company (GmbH) or stock company (AG) and are of small and medium size. They are all located in the region East of Berlin, between Berlin and Poland. All companies are presently wholly owned by the Treuhandanstalt. Previous owners, if become known, will be treated according to the applicable law.
- Each bidder is requested to make his own physical inspection and assessment of the company. The managers of the companies have been instructed to provide each and every information required by bidders duly authorized.
- The written authorization to visit the companies incl. address will be given only at the Treuhandbranch Frankfurt/Oder. Office hours Monday through Friday 9 a.m. to 4 p.m.
- Closing date for the bids is November 28, 1991, at 2 p.m. Bids are to be submitted to Treuhandbranch Frankfurt/Oder, Tenderbox ground floor. Bids by registered mail must arrive latest by that date. The bids will be opened immediately thereafter in the presence of a notary public.
- Bids are to be submitted in a sealed envelope marked with the name of the company for which the bid is submitted.
- Bids are to be in Deutsche Mark and valid for ninety days after closing date.
- The bids have to include a statement on the intentions of the bidder regarding the envisaged future of the company, e.g. continuation in its present form, change of product line, mergers etc. To be included are also investment and employment forecasts for the next three years.
- Bids have to be accompanied by a bid bond of five percent of bid value in the form of an irrevocable bank guarantee valid for ninety days after closing date. The bid bond will be returned to the unsuccessful bidder immediately after the final decision is made. The bid bond will be retained if the successful bidder fails to accept the decision.
- Decisions on the bids will be made by the Treuhandanstalt Frankfurt/Oder. Treuhandanstalt is not bound to accept the highest or any companies will be evaluated if submitted together with the bid.

These tender conditions are translated from the German language. In case of dispute the German wording will prevail.

When contacting the Treuhandanstalt Frankfurt/Oder, please use telex or fax rather than mail.

Hans H. Lürken Director Treuhandanstalt Branch Frankfurt/Oder

**Treuhandanstalt**  
Branch Frankfurt/Oder

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Telex (089) 162331 ttr de



## FT LAW REPORTS

## Writ can be served by agreement

**KENNETH ALLISON LTD v  
A E LIMEHOUSE & Co**  
House of Lords  
Lord Bridge of Harwich, Lord  
Templeman, Lord Goff of  
Chawley, Lord Jauncey of  
Tullichettle and Lord Lowry:  
October 17 1991

A WRIT may be effectively served on a defendant to contractual or non-contractual litigation if served, not in accordance with the Supreme Court Rules, but in the manner and at the place agreed between the parties, irrespective of whether they are agreed for the purpose of that particular litigation, or as part of a wider agreement relating to disputes between the parties in general.

The House of Lords so held when allowing an appeal by the plaintiffs, Kenneth Allison Ltd, from a Court of Appeal decision (Lord Donaldson MR dissenting) that a writ had not been duly served by Allison on the defendant, A E Limehouse & Co.

LORD BRIDGE said that Limehouse were chartered accountants. On October 5 1987 Allison issued a writ against them claiming damages for negligence in carrying out an audit. On October 4 1988, the last day of the currency of the writ, a Mr Swann attended Limehouse's offices to serve the writ.

The receptionist called the senior partner's personal assistant, a Mrs Morgan, to the reception area. Mr Swann showed her the writ.

She told him she would have to refer the matter to a partner. She left him in the reception area and went to speak to a partner, Mr Hall, who told her she might accept the writ.

Mrs Morgan returned to the reception area. She told Mr Swann she had been authorised to accept the writ. She received from him a sealed copy of the writ and a form of acknowledgement of service.

Limehouse applied for an order setting aside service or declaring that the writ had not been duly served. The application was dismissed by Mr District Registrar Rutherford, but allowed on appeal by Mr Justice McCullough. Allison's appeal was dismissed by the Court of Appeal, Lord Donaldson MR dissenting. Allison now appealed.

The question was whether the Rules of the Supreme Court relating to service constituted an exclusive code for effective service, or whether, if parties agreed on a mode of service outside the Rules, service in that mode ("consensual service") would be effective.

RSC Order 10 rule 1(1) provided that "a writ must be served personally". Sub rules (2)(3) and (4) provided for service by post or through a letter box, or on a solicitor.

Order 60 rule 2 provided that "personal service... is effected by leaving a copy of the document with the person to be served".

Where, as here, partners were sued in the name of a firm, Order 61 rule 3 provided that the writ might be served on any one or more of the partners, or by post to the principal place of business or on any person having control or management of the partnership business.

Mr Vallance for Allison submitted that the writ was served personally on Mr Hall.

That was not accepted. Personal service required that the document be handed to the person to be served.

It followed that Mr Vallance must rely on Mr Hall's express authorisation to Mrs Morgan to accept service on his behalf, which was communicated to and acted on by Mr Swann when he handed the writ to Mrs Morgan.

The relevant decisions were in relation to the 1983 Rules, which provided by Order IX rules 1 and 2 that the court might order substituted service where a plaintiff was unable to effect prompt personal service. By rule 10y service out of the jurisdiction was allowed in a contract case "unless the defendant is domiciled or ordinarily resident in Scotland or Ireland".

In *Montgomery, Jones & Co/1989/1 QB 487* a contract between an English company and a Scottish company provided that for the purpose of legal proceedings service on the Scottish company might be effected at the London Corn Trade Association.

Counsel argued that service was not valid unless effected according to the Rules. The Court of Appeal held that there was nothing in the Rules to prevent the parties from agreeing the manner of service.

Mr Dowley for Limehouse accepted that *Montgomery* was

correct but submitted that the principle must be limited to cases where agreement as to mode of service was embodied in a wider contract and provided for institution of proceedings relating to that contract.

It did not apply, he submitted, to an *ad hoc* agreement made in relation to other contemplated proceedings.

There was no good reason in principle for making that distinction.

If the rules in force in 1988 did not prohibit parties to the contemplated litigation from effecting service in a manner agreed between themselves, there was no ground for saying that an *ad hoc* agreement specifically relating to mode of service would, at that date, have been any less effective than an agreement embodied in a wider contract.

No doubt if the present case had come before the court in 1988, validity of the service would have been affirmed.

The question was whether subsequent changes in the Rules had introduced a prohibition on consensual service.

In 1990 a new rule 2A provided that parties to a contract might agree that the High Court should have jurisdiction on that contract and that service might be effected within or outside the jurisdiction in any specified manner.

It was a formal adoption and an extended application of the *Montgomery, Jones* principle.

The 1992 revision substituted for Order XI rule 2A a new Order 10 rule 3. It provided that where the High Court had jurisdiction to hear a contract case and the parties had agreed that a writ might be served in a specified manner and it was served in accordance with the agreement, then "notwithstanding anything in rule 1(1)... the writ shall be deemed to have been duly served".

Order 10 rule 3 of the 1985 revision provided that where a contract contained a term that the High Court should have jurisdiction and provided that that process might be served in a specified manner, service in accordance with the contract "shall... be deemed to have been duly served".

The crucial question was whether the express provision in the Rules for consensual service in contract cases excluded consensual service in any other case.

In the light of the legislative history it did not.

The general approval given by the Court of Appeal in *Montgomery, Jones* to consensual service outside the Rules must have been perfectly well known to the revisers and, if they had intended to curtail it, they would have effected that intention directly and unambiguously.

It was said it was necessary to require strict adherence to the Rules in order to achieve certainty with respect to date of service.

There was no reason why it should be more difficult to establish the date of consensual service than of personal service. There was certainly no difficulty in the present case.

Lord Donaldson summed the matter up correctly when he said: "The Rules are the servants of the courts and of their customers, not their master, unless expressed in a wholly mandatory and exclusive fashion, which these rules are not."

The appeal was allowed. Lord Templeman, Lord Jauncey and Lord Lowry agreed.

LORD GOFF agreeing that the appeal should be allowed but on different grounds, said that Order 10 rule 1(1) was expressed in mandatory terms: "a writ must be served personally on each defendant by the plaintiff or his agent".

It was important that those concerned at court offices should know precisely what mode of service had been adopted. It was not surprising that the rules should provide for a mandatory method of service.

Effect must be given to the Rules in accordance with their terms. Here there was no good and effective service in accordance with the Rules.

But Mr Hall and Allison acting through Mr Swann, proceeded on the common but mistaken assumption that service on Mr Hall's authorised agent would constitute good and effective service.

On those facts Limehouse would be estopped by convention from thereafter contending that there was not good and effective service.

For Allison: Philip Vallance QC (Gregory Roueliff & Milners).

For Limehouse: Dominic Dowley (Pinsent & Co).

Rachel Davies  
Barrister

Yesterday we were a regional communications company.  
Today our region's a little larger.



Ameritech began as the parent of the Bell companies that serve the Midwest, the most information-intensive area of the United States. Recognized as a leading communications company, Ameritech is a \$22 billion corporation that today brings its technological leadership and financial strength to all corners of the world.

In addition to pioneering fiber optic and ISDN technologies in the United States, Ameritech gave customers the world's first mobile telephone network. The company now is behind such innovative projects as bringing cellular technology to Poland, acquiring the Telecom Corporation of New Zealand and expanding a host of international services.

**Solutions that work:** The commitment to successful innovation has helped the company surpass \$10 billion in annual revenues and achieve the highest return to equity of comparable firms. This philosophy continues to drive Ameritech forward, leading the world in meeting customers' needs with advanced technology and giving a strong total return to our shareholders. For a copy of our Annual Report or other information, call Ameritech Investor Relations at 312/750-5353.

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## In brief...

**The 54-page guide includes the outline framework for a business plan and devotes sections to the implications of setting up in business, sources of advice and legal questions.**

***Available from Nat West branches. Free.***

## When the VATman gives no quarter

The company from which Mace bought the dumpers issued its invoice within 14 days - on November 2 - so Mace should have listed the deal in the next quarter, ending January 31. For this oversight, which did not deprive the VATman of revenue, Mace was required to pay a serious misdeclaration penalty of £11,700 (a standard 30 per cent of the VAT involved) and default interest of 5.982.

Governments bear only one-fifth of the cost of collecting taxes so have little incentive to reduce the cost of compliance according to a Europe-wide survey carried out by Graham Bannock & Partners, a consultancy.

"Traders and their staff are not, as the law seems to expect, experts in the complex VAT tax law," the IoD argued in its submission to Customs. "Even if they were, unintentional mistakes and genuine misinterpretations of the law would still take place."

The present regime is so seriously flawed that it has brought the penalty system and its administration by Customs, into public disrepute, the Institute of Chartered Accountants in England and Wales (ICA), argued in its submission to government. The penalties were often disproportionate to the nature of the error and produced no incentive to compli-



This is likely to become more difficult if Customs' plans to decentralise more advisory work to its regional offices, announced last month, are carried through. Customs'

known as "pay and file", from 1993 will add to the demands on the business community during the change-over period. Keeping the taxman happy is going to take an even larger amount of time.

**By Charles Batchelor**

**Sales Master Class, 80 Essential Tips for Serious Salespeople.** (Nigel Herzell-Thomas. *Hutchison*. 238 pages. \$5.99) makes the reader work harder for his nuggets of information. Too often advice remains on the level of banal generalisation and fails to provide enough significant detail and useful anecdote.

**The 25 Common Sales Mistakes and How to Avoid Them** (Stephan Schiffman. *Kogan Page*. 112 pages. \$5.99) continues the previous book's obsession with numbers but is more successful within its more modest aims.

Keep in touch with the business affairs of your prospective

This guide offers a combination of concise explanations of the theory combined with examples of how the strategies work in practice.

**How to Increase Sales without Leaving your Desk** (*Edmund T. Rubin; Kogan Page, 64 pages, \$1.99*) is a book that does not have a lot of selling and marketing space to subjects such as advertising, the use of mailshots and public relations. Short on the inspirational approach which drives JT Auer's encounters with his customers, it provides a workmanlike account of how to sell without ever meeting your prospects face to face.

READERS ARE RECOMMENDED TO SEEK APPROPRIATE PROFESSIONAL ADVICE BEFORE ENTERING INTO COMMITMENTS

**Interested partners should fax to 081-549 6209,  
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Telefon: 0231/25 70 53  
Telefax: 0231/25 70 50  
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Long established health and leisure club is seeking up to 5 loan funds to introduce membership fee credit scheme available to club members only. Similar schemes have proved highly successful in clubs throughout the U.K. Funds are required in five £10k tranches over the next twelve months with very strong potential returns offered. If you are interested in investing £10k or more contact Mike Howarth on 0865 791781

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100



## BUSINESSES FOR SALE

## Dispensa-Lace

The Joint Administrative Receivers offer for sale the business and assets of Dispensa-Lace, a well-known trading name in the knit and shoe care industry, based in Birmingham. Key features include:

- Established in 1980
- Leasehold manufacturing, packaging and distribution facility totalling 9,500 sq ft
- Turnover for 1990 approximately £520,000
- Experienced sales force throughout the UK
- Extensive customer base comprising of over 1,000 retail outlets and Multi-National Accounts
- For further details please contact W J Kelly, Joint Administrative Receiver, Ernst & Young, PO Box 1, 3 Colne Row, Birmingham B3 2DP. Telephone: 021-626 6262 Fax 021-626 6111

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## Touche Ross

O.A. (N.D.T. Services) Limited  
(In Administrative Receivership)

The Joint Administrative Receivers, Peter Bendall and Graham Watts, offer for sale the business and assets of one of the largest NDT Companies in the North West.

This well known company provides testing and research facilities of every description, comprising "NAMES" approved Test House, full Mechanical Test House, NDT Training Services and welder approval and training facilities to all specifications.

- Freehold and leasehold premises extending to approximately 6,000 sq ft, situated in Ilkeshere Park.
- Turnover approximately £1,300,000 per annum.
- Current term contracts with the principal Petro-chemical companies and fabrication yards in the North West.
- Highly skilled workforce.

Offers are invited for the business and assets as a whole or in part. Further details are available from Peter Bendall or David Elliott at the address below.

Reliance House, 20 Water Street, Liverpool L3 9LX.  
Tel: 051 236 0941 Fax 051 236 3477

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## Fresh Vegetable Processor

The Joint Administrative Receivers offer for sale the business and assets of Oakleigh (Leicester) Limited.

Key features include:

- 12,000 sq ft purpose built single storey leasehold in North West Leicestershire
- Incorporating:

- 2 fully automated potato peeling lines
- 1 fully automated carrot peeling line
- Full Baton cutting and grading line
- Parmesan cutting line
- Parmenter machine
- Unique automatic chateau machine

Customers principally comprise of nationwide distributors in the catering sector, together with food processors/manufacturers.

For full particulars of sale please apply to the Joint Administrative Receiver T. Fred. Ernst & Young, Provincial House, 37 New Walk, Leicester LE1 6TU.

Telephone: (0533) 549818 Fax: (0533) 551357

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## PLC's for sale

A selection of up-to-date PUBLIC COMPANIES available from stock for immediate trading, complete with 117 Confidential. Share capital requirement already satisfied.

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## CONSERVATORY COMPANY

(For Sale)

Company manufacturing and selling quality timber framed conservatories with excellent track record.

Turnover £1.2m p.a. with 35 employees. Date: Dec.

Write to Box H9134, Financial Times, One Southwark Bridge, London SE1 9HL.

## PLASTIC INJECTION

MOULDING CO.

Herts/Beds - Long established - major P.L.C. accounts - Good Margins. Some own products - fully equipped factory - On good lease - immediate sale required - Good opportunity - Offers -

0438 715262

Write to Box H9134, Financial Times, One Southwark Bridge, London SE1 9HL.

## FOR SALE

Established Telecommunication Manufacturing/Services Business Approved to BS750 Part 2

Reply - principals only.

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## HOLIDAY

BOAT HIRE COMPANY

Turnover £140,000

West Midlands Base

A profitable company with a high reputation for customer care.

For further details contact

G. R. Butcher, Tel: 01-486 0253

Fax: 01-486 0253

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## Property Portfolios

The property portfolios of Warringtons plc and certain of its subsidiary companies, are offered for sale as a whole, in packages or as individual properties:

## Package A

West Midlands Portfolio

Mainly industrial tenanted properties

Combined gross rental income in excess of £265,000 p.a.

Portfolio also includes ground leases with 70 to 99 years remaining

Current aggregate of income in excess of £2,500 p.a.

## Package B

Residential Properties

Comprises two sites - one in Chester and the other in Broughton

Luxury developments in varying degrees of completion

For sale as a whole, or as individual completed residences

## Package C

Other Investment Properties

Variety of properties, mainly in North West and South East

Combined current rental income in excess of £120,000 p.a.

For further information, please contact the Joint Administrative Receivers N. J. Hamilton and W. S. Martin: Ernst & Young, Lowry House, 17 Marble Street, Manchester M2 3SW. Tel: 061-953 9000. Fax: 061-834 7117 or the Consultant Surveyors retained by the Receivers, J. Trevor & Sons, Barnett House, Fountain Street, Manchester M2 2AN. Tel: 061-228 6752. Fax: 061-236 8306 identifying which package(s) you require.

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The Joint Administrative Receivers of City Jeroboam Plc offer for sale:

## FOUR WINE BARS/RESTAURANTS operating in The City and West End

Combined turnover circa £1.3 million.

Three locations in the City of London, one being a private members club, and one West End based wine bar.

Reliable and experienced existing management.

Offers will be considered for the group or for individual units.

For further information contact Simon Lumsden or Peter G Mills on 071-637 5377 at the offices of Smith & Williamson, No. 1 Riding House Street, London W1A 3AS. Fax: 071-323 5683.

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## BUSINESSES FOR SALE

## Commercial vehicle body manufacturer

(In Receivership)

## York Bodybuilders Limited

- Broad customer base.
- Good order book.
- 25,000 sq.ft. of leasehold premises at Clay Cross.
- Approximate annual sales £1.3m.
- Approximately 40 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## York Trailer Holdings Plc Group of Companies

(In Receivership)

The business and assets of the group are offered for sale either as a whole or individually.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## Parts supplier to the commercial vehicle market

(In Receivership)

## Transport (U.K.) Limited

- Countrywide branch and franchise distribution network.
- Extensive van sales network.
- 30,000 sq.ft. leasehold distribution centre at Corby.
- Approximate annual sales of £7m.
- Approximately 70 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## Refrigerated semi-trailer manufacturer

(In Receivership)

## Thermstar (U.K.) Limited

- Market leader.
- Good order book.
- 150,000 sq.ft. of good quality freehold facilities at Harewell, County Durham.
- Excellent reputation for innovation and product quality.
- BS5750 accredited.
- Approximate annual sales of £16m.
- Approximately 180 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## Trailer axles and suspensions manufacturer

(In Receivership)

## T.E.C. Transport Equipment &amp; Components Limited

- Manufacturer of fifth wheel couplers - well known Big D brand.
- 50,000 sq.ft. of leasehold premises at Corby.
- Strong overseas sales and distribution network.
- Approximate annual sales of £10m.
- Approximately 60 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## Commercial semi-trailer manufacturer

(In Receivership)

## York Trailer Company Limited

- Market leader.
- Strong brand image.
- Good order book.
- 250,000 sq.ft. of good quality freehold facilities at Northampton, N. Yorkshire.
- BS5750 accredited.
- Approximate annual sales of £23m.
- Approximately 275 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and D.J. Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## Aluminium and steel commercial vehicle tipper body manufacturer

(In Receivership)

## Neville Charrold Limited

- Good order book.
- 50,000 sq.ft. of freehold premises at Mansfield.
- Strong export market.
- Well established U.K. distribution network.
- Approximate annual sales of £5m.
- Approximately 60 employees.

For further information in the first instance please contact G.D. Brettell, Tel: 071 212 6101 or 071 212 6115 Joint Administrative Receivers C.J. Hughes and David John Stokes Cork Gully, Shelley House, 3 Noble Street, London EC2V 7DQ Tel: 071 606 7700 Fax: 071 606 9887

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## ARTS

## Sculpture married to architecture

William Packer reviews Anthony Caro

At 67, Anthony Caro is now generally acknowledged as pre-eminent in his field, the one British sculptor of unquestioned international authority and reputation. Since the death of Henry Moore five years ago, whose assistant he had been in the early 1950s, he has stood quite alone, and indeed bestrode his narrow world long before that. If Moore was over the old King in his castle at Much Hadham, Caro was Prince Hal, commanding his own generation, creating the new order, setting the pace.

Yet it all happened for him very quickly. The Tate bought his first Caro, a figurative work of the mid 1950s, in 1959. A year later he was back from a first visit to America already the friend and colleague of his new-found American peers, most especially the critic Clement Greenberg, the sculptor, David Smith, and the painter, Kenneth Noland. He began at once to make welded-steel sculpture of an uncompromising abstraction, and as soon was famous. Major one-man and group exhibitions followed in close order, culminating in 1969 in the retrospective that was the Hayward Gallery's inaugural exhibition.

Since then, surprisingly, while the career has prospered wonderfully at home and abroad, the Tate, though continuing to acquire examples of his work, has waited until now to offer him a significant solo exhibition. Thus *Sculpture towards Architecture*, which fills the long central axis of the Tate with a mere four works (until January 28, sponsored by KPMG Management Consulting), is necessarily an event of considerable interest and even importance.

Small wonder then that others should take their chance to mount pendant shows: Anneli Juda Fine Art (23 Dering Street W1, until November 30) and Andre Emmerich (41 East 57th Street, New York, until November 16) show works from the recent *Cascades* series in tandem; and Knoedler (22 Cork Street, until November 16) has two large pieces, of 1974 and 1987.

Caro has long professed, indeed demonstrated his interest in the consonance between sculpture and architecture. He has done so not merely by simple reference through the inner structures and integral order of the works themselves, but often in the most direct and practi-

cal of ways, working closely with architects from the outset of any particular project. What the Tate has offered him is the chance to work on a scale not merely architectural but monumentally so.

The high colonnaded neo-classicism interiors of the Tate's Duveen Galleries offer a challenge which Caro has met head-on, in the central octagon, with his own *Octagon Tower/Tower of Discovery*, a wonky swirling edifice that the visitor may climb, with some care, to view the long halls far below. He has made several such overtly architectural pieces in recent years, redolent of shacks and tree-houses, albeit of heavy metal. This one also carries clear hints at Tatlin's *Tower* and Boccioni's futurist figures, for Caro is much given to architectural allusion.

But if the tower is immediately the more striking, the more massive is *After Olympia*, some 25 yards long, made in 1987 in conscious paraphrase of the west pediment of the Temple of Zeus, now in the Olympia Museum. It is long, low and narrow, and would be in high relief were it set in its natural position on the Temple front. The other works, *Night Movements* - four free-standing related elements of 1990 - and *Xanadu* - a kind of metal hedge or fence of 1988 - huge as they are, seem small by comparison.

But all of them demonstrate Caro's remarkable formal command of his material, his compositional dexterity and assurance, his unfailing lightness of touch and formal wit. The intractable steel is bent, folded, cut like butter, the particular off-cut, fragment, remnant, picked up and put in its place, just so. Such facility is enviable, indeed amounts to true quality, but it remains a formal quality. And it is here that we enter more debatable territory.

For Caro came into his own by his rejection of an openly subjective and personal expression in favour of something infinitely more remote, impassive, cerebral. All hint of figurative reference was given up, and any humanity that remained was only what the viewer might bring with him, in terms of a scale with which he might identify, and the spaces and structures he might move through and around in his imagination. He would still have it both ways, vehemently resisting the very idea that his works are about anything other



'Octagon Tower/Tower of Discovery', 1991, by Anthony Caro: one of four monumental pieces currently at the Tate

than what they are in their physical being, yet provoking the imagination by the suggestive perversity of his titles, and producing images that are undeniable in the imaginative associations - to landscape, figures, still-life - that they generate. The *Cascades* at Anneli Juda make the point as clear as could be, images of falling movement, of water, ice, a branch, the cloth of the table, and all done with an elegance of functional invention and transformation that is quite remarkable.

Anthony Caro remains the consummate, inventive formalist he has been these 30 years past, but Caro the figurative, expressive, truly free and intuitive artist was never away, only suppressed. It is time he came out.

In Jones's treatment, *Das Rheingold* was a comedy with serious undercurrents; further evidence that he is probably the most original producer now at work in British opera is provided by the development of those portraits. As ever in his work, the style is easier to accept, succumb to, be enchanted by, than to describe. He invents his own rules of dramatic syntax and unbridled theatricality, those rules prove to keep faith with Wagner's - honestly, simply, directly.

In Act 1 a graded series of semi-abstract tree patterns painted on the backcloths is phased, one by one, to parallel Siegmund's movement toward sword-discovery. Again, use of backcloths and front-lighting makes Brünnhilde's final encirclement in fire a moment of

## Die Walküre

THEATRE ROYAL, GLASGOW

The new Scottish Opera *Ring* reached its second part on Saturday, with a *Walküre* that to our enthralled ears and eyes opened new worlds of colour, fantasy, narrative illumination, new routes of approach to Wagnerian music-drama. A few means will be omitted during the course of this notice: but the biggest of them concerns the time it has taken to arrive from the triumphant 1989 *Rheingold* at this brilliant and beautiful new *Walküre* (and the production of *Siegfried* threatens to be similarly delayed).

That's far, far too protracted a building time-scheme. For without doubt this is proving the era's trend-setting *Ring*, as it this country and perhaps even elsewhere, and in spite of all the company's current monetary agonies, ways must be found for Scottish Opera to move faster ahead on the project, freely and without delay. The success of that *Rheingold* was no fluke. Richard Jones (producer) and Nigel Lowery (designer) make the point by taking the same theatrical style introduced there - a dazzling mixture of bright poster-past colours, images child-like in vividness, a semi-surreal control of theatrical space and symbols, and the sharpest-pointed narrative economy - and developing it to suit the grander and more emotional potential of the second *Ring* instalment.

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purest theatrical magic - the more magical, indeed, for the impudent sleight-of-hand and age-old theatre techniques involved. Even in those few moments when I failed to follow the producer's gist - for instance, his presentation of the Valkyries as purple-clad, high-winked witches on stilts, which seemed unusually at odds with the music - I was still swept along by the exhilaratingly free-spirited theatricality of the show.

In new ways this low-budget *Walküre* creates and sustains epic dimensions (so painfully lacking in the Royal Opera's time-tunnel *Ring*). That the Wagnerian lyric theatre can be again a place of fantasy, as it was in the Bayreuth heyday of Wieland Wagner but has been too seldom since, is asserted with confident authority by the Scottish Opera production team. They and their intelligent, classed cast achieve this no less by telling the story with close accuracy, and by beaming fresh light on the characters (the sequence of glances, nervous, embarrassed, then frankly amazed, exchanged by Siegmund and Sieglinde is a marvellous example). The baggage of heavy-breathing ideology is thrown out; the Wagnerian vehicle moves forward with new fleetness of foot; but the intellectual seriousness of the whole journey can hardly be over-emphasised.

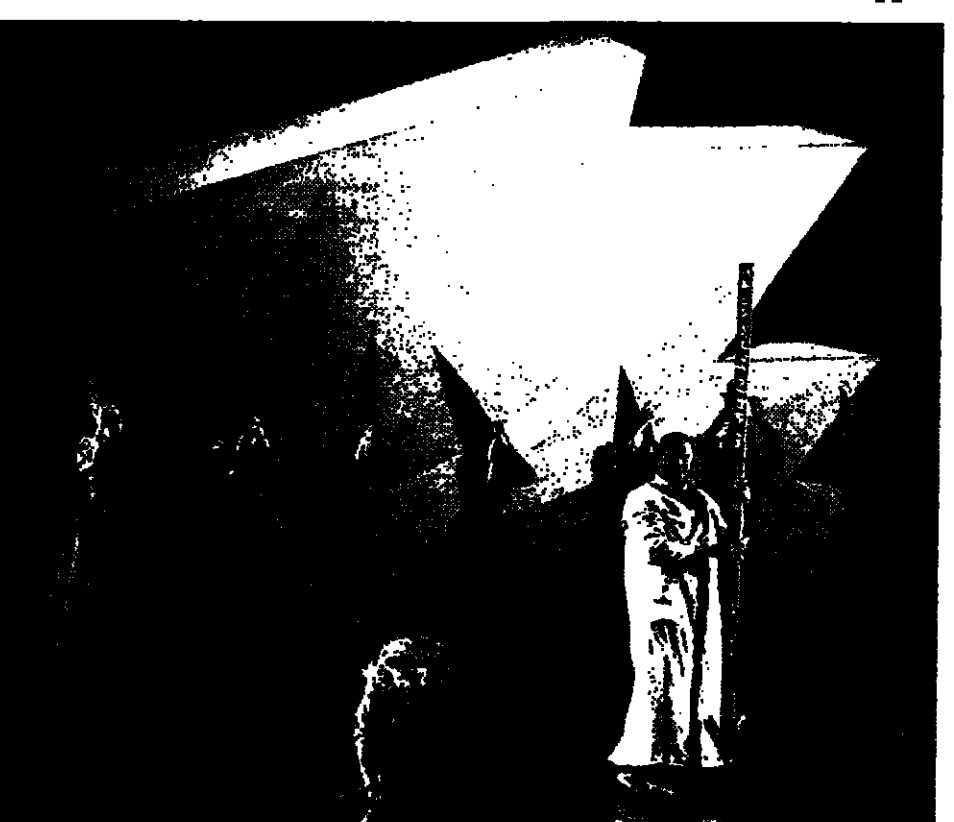
The unfolding of a new *Walküre* is always a momentous happening in the life of any opera company. Not every thing can be expected to come right, especially if, as here, conductor and cast are tackling the work for the first time in the theatre. This will place in perspective Saturday's most important disappointment: the conducting of John Maucei and the playing (too often scratchy and unblended) of the orchestra. Mr Maucei, who made the *Ring* prelude dance and sparkle, seems quite overwhelmed by the greater demands of *Die Walküre*. A lack of weight - which, in this ideally medium-sized theatre, should be much more easily compassed - went hand in hand with a failure to grade each of the mighty act-spans toward climax. Little things were sometimes sensitively achieved; largeness proved elin-

sive. Perhaps it is because the conducting falters in holding taut the unfolding line of drama that one continually registers the erratic command of German by an entirely English-speaking set of principals. (Was there a language coach on set?) The three young Americans of the cast - John Keyes (Siegfried), Carol Yahr (Sieglinde), and Kevin Maynor (a pleasant-sounding, insufficiently imposing Hunding) - tend to pronounce, not always accurately, rather than speak idiomatically in song; Jane Eaglen's Brünnhilde gabbles; and only Willard White (Wotan) and Sally Burgess (a sensationally glamorous, bold-voiced Fricka) show any sort of skill in striking fire from words and tone.

No doubt matters will improve; already the vocal rightness of the entire cast and the sympathetic character-depiction of almost all count as considerable compensation. Mr White closed the evening with a *Farewell* - rich, warm, glorious in emotional power and musical shapeliness - that surpassed the highest expectations. He is a superb artist approaching the peak of his mature powers, and once he has learned to pace himself more cunningly through the whole opera, his addition to the ranks of world-class *Walküre* Wotans will be a cause of universal celebration.

To discover two such promising Wagner voices, full-grained, smooth in legato, free from bumps and grinds, as those of Miss Yahr and Mr Keyes is a Scottish Opera coup. Miss Eaglen in her first Wagnerian dramatic-soprano role must be judged with a Solomon's blend of tenderness and severity. After a nervous warty the voice began to ring out with a clarion freedom that soon had us reaching for the hasty comparisons with Eva Turner. In terms of personality, though, she shows us an uncommunicative Brünnhilde - the problem is not the soprano's figure, rather her constrained stage manner and address. Of a young British singer so boundless in potential we can be forgiven for intemperately demanding much more.

Max Loppert



David Murray Jane Eaglen and Willard White as Brünnhilde and Wotan

## The Hang of the Gaol

LATCHMERE THEATRE, BATTERSEA

In some respects this 1978 play by Howard Barker seems very topical, and in others it is as dated as the blasts of punk music which punctuate the scenes. All ways round, it is a kind of colourful piece of writing which crowds the stage political conscience, reminding one how this talented maverick came to be wrongly bracketed in so many minds with the state-of-the-nation playwrights of the 1970s.

Barker's setting is a burnt-out jail the morning after the failure. Five investigators pose around the charred remains as the two remaining "screws" try to effect a ritual defecation in the ruins and an inquiry is set in motion. The prison governor is a liberal, who has befriended a fugitive murderer, Turk, played with great cunning by Jonathan Coyne, is one of several overtly Shakespearean characters - a cross between Lear's fool and Caliban, whose presence emphasises the gullibility of authority while underlining Barker's obsession with the power - and impotence - of language. "Tell 'em in Whitehall there is no reconciling R.M. Thatcher with a hanging in the testicles," is Turk's final, unhappy retort.

What has dated is not so much the play's subject matter - prison riots and overcrowding are, if anything, bigger news today - as the way in which the issues are personified. After more than a decade of Thatcher

as Aunt Sally, it comes as a shock to find the principal political villain is a smarmy socialist in a raincoat, who talks man of the people while acting establishment stage.

At heart this is a homily about integrity versus state service. In the best scene of the play, cracklingly directed by Chris Fisher, the fragility of that integrity is illustrated through the cross-questioning of the panel. Brandishing a whisky bottle, Michael Vaughan's inspector loses himself in his infatuation with his female colleague, allowing a clerical pipsquawk to explode into a fascist interrogation, while the unfortunate woman who is the object of Jardine's tipsy fancy fidgets with professional and sexual discomfiture. Yet Jardine, as Vaughan shows so well, is a man of principle and intelligence who knows when he is being knobbled.

It is downhill from then on, in as Barker gets ever more self-indulgent, although one can forgive him a lot for the breadth of his vision and the unflagging energy of his writing. And the London Actors Company throw the sort of resources into this revival that only Barker and Shakespeare can command. Twelve actors in a fringe play. Now, that's really dated.

Claire Armitstead

## Feldman Soloists

ALMEIDA THEATRE, ISLINGTON

Any Londoner who follows new music must feel the loss of the annual Almeida Festival solely. It was an open Continental window, and a showcase for fresh British composers, and a trans-Atlantic conduit too. Still, the new Almeida directors keep creditable room during the season for music in the old Almeida spirit; just now there is a mini-festival going on (until November 24, with Goethe Institute sponsorship), "A German Legacy". The Feldman Soloists and their guests, who offered "A Berlin Legacy" on Sunday afternoon, recalled the best of the old Festival.

The ensemble takes its name from the late American composer Morton Feldman, and between the two intervals we duly heard his 1972 piece *Why Patterns?* It occupied most of half an hour, very very gently. Long, mostly even notes from the central flute - often in descending chromatic scales, though when Eberhard Blum changed to a bass flute it was only to breathe one note over and over again; softly chiming chords from glockenspiel and piano, never quite in synch.

After *Why Patterns?* came an answer of sorts, in the already familiar *Time Cycle* by the German-American Lukas Foss. It runs variations on tick-tock patterns of his writing. And the time, in this version with four very busy instrumentalists supporting the soprano (Ilse van de Kasteelan, coolly fervent). Foss's texts - Auden, Housman, Kafka, Nietzsche - are dramatized in his disjunct vocal line, whereas the tick-tocks belong to a quite different vein of experiment. The amalgam is

"effective" enough; this composer's famously keen ear has always been quick to pick up trends, even promiscuous.

The things that challenged and rewarded musical ears had come, however, in the first third of the concert. The big flute-and-piano piece in Two Parts by Stefan Wolpe, a Schoenberg pupil who made a career as an influential, much-loved teacher in Israel and America, is a characteristic exercise: toughly musical to a high standard, if a bit monochrome. Blum's forceful intelligence, with Nils Vigeland impeccably alert at the piano, exposed the original shrews of the musical argument.

Then Blum figured alone, and brilliantly, in the other ear-opening piece, Kurt Schwitters' *Ursolate* for speaking voice. The "score" consists of nonsense-words and bare letters of the alphabet in extended patterns, for rhythmic declamation without definite pitch. A whole "sonata" - an initial Rondo developed to the hilt, then a Largo in long gasps, a witty Scherzo-caricature and a classical Presto finale - is sketched in toneless black-and-white: no actual music, but far too lovingly drawn to be a mere revue-squib. Blum made it into a sonata, a high comedy, with a seriously provoking subtext. Might the Classical sonata-ideal that he captured so expertly be after all just a sequence of aural thrusts, repetitions and pull-backs, and its standard "musical" dress mere window-dressing? It doesn't bear thinking about.

David Murray

## INTERNATIONAL ARTS GUIDE

TODAY'S EVENTS

## AMSTERDAM

Concertgebouw 20.15 Thijs Kramer conducts a programme of choral works, including the Bach Magnificat and extracts from Mozart's Coronation Mass K317. In the Kleine Zaal, Sarah Walker accompanied by Imogen Cooper gives a Schubert Lied recital. Tomorrow at 12.30: lunch concert with Hartmut Haenchen and the Netherlands Philharmonic Orchestra. Tomorrow, Thurs and Sat at 20.15, also Sun at 14.15: Haenchen conducts Shostakovich and Beethoven, with Bella Davidovich piano soloist (6718 345).

## ATHENS

Concert Hall 21.00 Camerata of the Athens Concert Hall opens a new series of chamber orchestra concerts (722 5511).

## BERLIN

Schauspiel-Theater 20.00 Mozart's *Le Nozze di Figaro* staged by Alfred Kirchner, in a co-production between RIAS and the Deutsche Oper. Runs till Nov 26, with next performances tomorrow and Sun (West Berlin 7931 515).

Philharmonie Kammermusiksaal 20.00 Hansjörg Schellenberger conducts the Haydn Ensemble Berlin in music by Michael and Joseph Haydn, with Daniele Damiano bassoon soloist. Tomorrow, Thurs, Fri, Sat: James Levine conducts the Berlin Philharmonic Orchestra (West Berlin 2614 363).

## BOLOGNA

Teatro Comunale 21.00 Pinchas Zukerman is conductor and violin soloist in an all-Mozart programme with the English Chamber Orchestra. Sat and Sun: Jukka-Pekka Saraste conducts the Orchestra of the Teatro Comunale in music by Wagner and Liszt (529999).

## BRUSSELS

Palais des Beaux Arts 20.00 Constantin Orbelian conducts the Moscow Chamber Orchestra in music by Bach, Prokofiev and Haydn. Tomorrow: Pierre Bartholomée conducts the Liège Philharmonic Orchestra in Tchaikovsky's Fourth Symphony and Mozart's Piano Concerto No 27, with Luc Devos, Sun: Jean Fournet conducts the Belgian National Orchestra in a programme of Lalo, Poulenc and Beethoven (507 8200).

Monsieur 20.00 Das Rheingold: opening night of the third cycle of the Brussels Ring, staged by Herbert Wernicke and conducted by Sylvain Cambiagio. Tomorrow: *Die Walküre*, Fri: Siegfried, Sun: Götterdämmerung. The final cycle begins next Tues (219 6341). Théâtre National 20.30 Kleist's *Amphitryon* directed by Marc

Liebens. Runs till Sat. The next production is Böchner's *Leonce and Lena*, opening on Nov 21 (217 0303).

## CHICAGO

Lyric Opera 19.30 Andrew Davis conducts Peter Hall's production of *Le nozze di Figaro*, with a cast led by Samuel Ramey, William Shimell, Felicity Lott and Frederica von Stade, also Fri. Tomorrow and Sat: *I Puritani* (332 2244).

## LONDON

Covent Garden 19.30 Sian Edwards conducts Nuria Espert's production of *Rigoletto*, with Matteo Manuguerra in the title role, Bruno Caproni as the Duke and Judith Howarth as Gilda. Tomorrow, Fri and Sat: David Lindley's ballet *Full-length Cyrano*. Thurs: new production of *Les Huguenots* (071-240 1066). Royal Festival Hall 20.00 The Michael Nyman Band presents the world premiere of the concert version of Nyman's soundtrack for *Prospero's Books*. Tomorrow: Oliver Knussen conducts music by Schoenberg, Stravinsky and Tchaikovsky (071-228 8800). Sadler's Wells 19.30 Sankai Juku: presented as part of the Japan Festival, this performance combining opera and dance provides an opportunity to witness the surreal slide to Butoh culture. Runs till Nov 2, except Sun and Mon (071-278 8916).

Royal Theatre 20.00 Rambert Dance Company opens a one-week season which will include three London premieres: Lucinda Childs' *Four Elements*, Siobhan Davies' *Signature* and Laurie Booth's

Completely Birdland. Next week: Northern Ballet Theatre production of *Romeo and Juliet* (071-484 5090).

## MADRID

Tonight's concert at the Auditorio Nacional de Musica is a programme of string sextets by Richard Strauss, De Pablo and Brahms, played by the Sexteto de la AIEC de Lilla, with an alternative programme on Thurs. Tomorrow's concert by the Deutsche Camera Neuss includes Mozart's Piano Concerto No 14, with Joaquín Achúcarro director and soloist. On Fri, Sat and Sun, Aldo Ceccato conducts the Spanish National Orchestra in a programme of Stravinsky, Bernaola and Dvorak (337 0100).

## NEW YORK

Avery Fisher Hall 19.30 Kurt Masur conducts the New York Philharmonic Orchestra in Dvorak's *New World Symphony* and Schnittke's *First Cello Concerto*, with Natalia Gutman. Thurs, Fri, Sat and next Thurs: Claus Peter Flor conducts Mozart and Shostakovich, with Rudolf Firkušny piano (875 5000). Carnegie Hall 20.00 Kazimierz Kord conducts the Warsaw Philharmonic Orchestra in Beethoven's *Egmont* overture, Shostakovich's *First Symphony* and Prokofiev's *Second Piano Concerto*, with soloist Alexander Toradz. Sat: Ozawa conducts *Pique Dame* (247 7800). Metropolitan Opera 20.00 Julius Rudel conducts *Die Zauberflöte*, with a cast including Dawn Upshaw, Ruth Welting, Jerry Hadley and Mikael Melbye, also Fri. Tomorrow: *La fanciulla del*

West (362 6000). New York State Theater 20.00 Mark Gibson conducts Frank Corrao's production of *Madama Butterfly*, with Cynthia Lawrence in the title role. Tomorrow: *Die Soldaten*. Thurs and Sun matinee: *La bohème*. Fri: *The Mother of Three Sons*. Sat: *La traviata* (870 5570).

## PARIS

Châtelet 19.00 Denis Cohen conducts the Ensemble Orchestral de Paris in Schoenberg's *Second Chamber Symphony*, Hindemith's *Viola Concerto* and Cohen's *Etude pour le poème*. Tomorrow: song recital by Gary Lakes. Fri: William Christie conducts Les Arts Florissans (4028 2840). Opéra Comique 19.30 Moscow Chamber Opera in Shostakovich's *The Nose*, staged by Boris Pokrovsky, repeated tomorrow. Thurs to Sun: Mozart double-bill (4286 8883).

## PRAGUE

This week's programme at the Smetana Hall includes a concert tonight at 19.30 with the Czech Radio Symphony Orchestra conducted by Shlomo Mintz. The programme consists of Mozart's *Symphony No 35* and Mahler's *Fifth*. Tomorrow: Goran Nilsson conducts the Prague Symphony Orchestra in Sibelius' *First Symphony* and Ravel's *Piano Concerto in G*, with Remo Remoli. Justus Frantz gives a Mozart piano recital on Sat (*Prasne brany* 2, 232 5858). The National Theatre repertory includes Lucia di Lammermoor tonight and Don Carlos on Thurs. The Smetana Theatre has *Tosca* on Fri and La

traviata on Sat. Pre-booking at city centre ticket agencies (Bohemia, Na Příkopě 16, 226738, or Melanich, Wenceslas Square 38, 226714) and theatre box offices.

## VIENNA

Staatsoper 19.30 Pinchas Steinberg conducts *Tosca*, with Mara Zampieri in the title role, Giuseppe Giacomini as Cavaradossi and Eduard Tuganjan as Scarpia. Tomorrow: *La traviata* (5144 2960). Musikverein 19.30 Yuri Bashmet directs the Moscow Soloists in music by Mozart, Schnittke and Beethoven/Mahler. Tomorrow, Thurs and Fri: Rudolf Buchbinder plays Mozart with the Vienna Symphony Orchestra (505 8190). Konzerthaus 19.30 Frans Bruggen conducts the Orchestra of the Age of Enlightenment in symphonies by Beethoven and Haydn, also Haydn's *D major Cello Concerto* with Anner Bylsma. Tomorrow: Wynton Marsalis and Band (7124 6860).

## ZURICH

Opernhaus 19.30 Heinz Holliger conducts the Follonier production of *Die Zauberflöte*, with a cast including Matti Salminen, Josef Protschka and Anton Scharinger. Fri and Sun: Ruggero Raimondi sings Don Giovanni. Sat: Der Rosenkavalier, with Gwyneth Jones as the Marschallin (251 0908). Tonhalle 19.30 Yehudi Menuhin conducts the Tonhalle Orchestra in Malcolm Arnold's *Tam O'Shanter* overture, Mendelssohn's *Scottish Symphony* and Mozart's *Haffner Serenade*, with Anton Fietz violin soloist. Repeated tomorrow, Thurs and Fri (201 1580).

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1540-1610 Your Money  
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# FINANCIAL TIMES

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Tuesday October 22 1991

## Some Angst in Germany

WHEN the collapse of communism propelled together the two unequal halves of Germany last year, it was clear that unification would bring opportunity and challenge in equal measure. The scale of the adventure has exceeded both the expectations and the initial problem-solving capacities of Chancellor Helmut Kohl's government. Germany still needs to find a consensus for shoring the political and economic costs of unity if the process is to be brought to a successful conclusion.

Economic and social conditions in the new Germany are a great deal more polarised than in the old Federal Republic. One illustration of the strain comes from the state of affairs during the last few weeks on temporary homes of asylum-seekers. Germany's neighbours and allies may have to accept that the domestic political environment is becoming much less settled and predictable than the one to which they had become accustomed for 40 post-war years.

The greatest force for inequality has, of course, been the legacy of communism in the east. Yesterday's report from west Germany's five leading economic research institutes shows that the post-unity picture of expansion in the west of the country and slump in the east is giving way to a more balanced state of affairs. Gross national product is due to rebound sharply in east Germany next year after a 30 per cent fall in 1990-91.

But the Bonn government should guard against premature reactions of triumph. By the second half of the 1990s, the area east of the Elbe should be one of Europe's fastest-growing regions. Nonetheless, it will probably take another two years at least for east Germany simply to make up the very sharp fall in output lost as an unavoidable result of the shock of last year's introduction of the D-Mark into the region.

### Budget swollen

The flows of public sector funds into the east to allay the social costs of this economic dislocation have greatly swollen the German budget. Even for a rich country like the Federal Republic, a fiscal deterioration is not a pleasant prospect.

## Industry puts its case

ANYONE WHO has not followed the debate about British industry may find yesterday's report from the CBI on manufacturing hard to fathom. Here we have the Confederation of British Industry sweating at the word processor, to argue that manufacturing industry matters, as if the topic were some strange branch of algebra. We are told that manufacturers employ a lot of people (10m, directly and indirectly) and are crucial to the trade balance.

Context, however, is all, because during Mrs Thatcher's reign it was held by some in high places that manufacturing did not matter; what counted were internationally tradable goods and services - the balance between goods and services being of no fundamental importance. As economic theory this may be unassailable; in practice it was a battle ground upon which the proponents of industrial interventionism and laissez-faire clashed each other senseless.

Some industrialists feared this anti-manufacturing virus had spread to the CBI. A debate at last autumn's conference led to a report which proposes the creation of a national manufacturing council within the CBI, which is a bit like setting up a society for the appreciation of the Virgin Mary inside the Vatican.

On the whole, however, the report's points are made to good educative effect, mixing case studies with argument. This educational role should not be underestimated, given the previously unpublished 1990 Gallup survey showing that youngsters en route for higher education rated industry a less attractive career option than either teaching or the civil service. Only shop-keeping came lower. The CBI is right to conclude that it has a responsibility to do something about industry's image.

**Overall performance**

When it comes to a policy framework, the starting point is that industry has done well in the 1980s in terms of industrial relations, exports and overall performance, but that with productivity levels 30 per cent below those of west Germany, 35 per cent behind Japan and 45 per cent short of

The world telecommunications industry is in a frenzy of match-making. The leading companies are trying to form relationships which could define the shape of the industry for the rest of the decade.

Many of their negotiations came to a head in Geneva earlier this month, when the industry gathered for a giant trade fair, held once every four years. When the trade fair ended, it was still uncertain who was engaged to whom. Finalising the new relationships may take months.

BT, previously British Telecom, made the first move by inviting Germany's Deutsche Telekom (DT) and Japan's Nippon Telegraph and Telephone (NTT) to join a global alliance, called Syncordia. But no sooner had BT announced the venture than other groups - France Telecom and MCI and AT&T, both of the US - tried to stop the match going ahead. BT's alliance has since been nicknamed Dis-cordia.

This enthusiasm for marriages spanning the globe marks a turning point for the \$300bn telecommunications services industry as it makes the transition from a monopolistic to a more open, competitive structure. For decades, most telecommunications carriers have been state-owned monopolies, while international communications have been run co-operatively by the carriers as an extremely profitable cartel.

In recent years, though, liberalisation has given the telecommunications companies the freedom to expand in foreign markets and, in an increasing number of cases, privatisation has given them the incentive they needed. The industry is now rushing to catch up with other sectors of the world economy which are already operating on a global basis such as car making and chemicals.

The main aim is to form strategic

## The main aim is to form strategic alliances to cater for the global communications needs of multinationals - replacing the patchwork of national networks with seamless global networks

alliances in order to cater for the global communications needs of multinational corporations. The idea is to replace the current patchwork of national networks with seamless global networks.

At present, multinationals wanting to link their far-flung operations with advanced communications have to install their own private networks which is costly and means they have manage the networks themselves. The new partnerships would be able to provide services such as video conferencing and short-code dialling without the multinationals having to expend so much time and money.

What is likely to emerge from the current negotiations is a series of competing alliances, structured as joint ventures. Full-blown mergers are not yet on the table because of the political sensitivity that would surround one leading national carrier buying another.

The ferment is similar to that in the telecommunications equipment industry five years ago when national champions were joining forces to create about half a dozen global organisations competing with one another. The restructuring also has parallels with the airline industry where national flag carriers such as British Airways are trying to form alliances to turn themselves into global competitors.

It is not only the structure but the character of the industry that is changing. The sector, previously populated by state utilities, is coming

## The telecommunications industry is restructuring to meet global competition. Hugo Dixon on the emerging partnerships

# Busy lines all around the world

alive.

The main actors are: ● Mr John Vallance, BT's chairman. His stated ambition is to turn BT into the world's leading telecommunications group. Though not the biggest carrier, it is the most profitable, earning more than £3bn before tax in the year to the end of March. It is also the only leading European carrier to be privatised and is correspondingly the most aggressive about pursuing foreign opportunities.

Mr Vallance has identified the market for serving the global needs of multinationals as worth \$40bn-\$50bn a year. In order to attack this, he has set up Syncordia, which is building a network to provide services in 50 countries by the end of next year. The company is based in Atlanta, Georgia, because the largest concentration of multinationals is in the US.

Mr Vallance has invited Deutsche Telekom and NTT to take minority shares of 26 per cent each in Syncordia.

● Mr Helmut Rieke, DT's chief executive. His main attention is on modernising the telecommunications infrastructure of what used to be East Germany. But he has had many international suitors because DT is the largest carrier in terms of revenue in Europe and is strategically located at the gateway to eastern Europe. "We are in close discussions with our British partners, but we also are in discussions with others," he says.

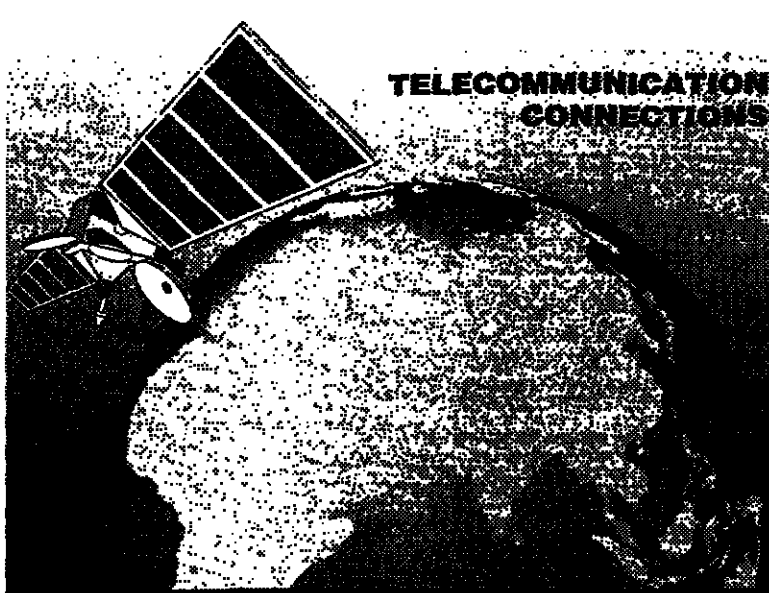
Mr Rieke is understood to be annoyed that he has only been offered junior status in BT's Syncordia. But, with other carriers knocking on his door, he would seem to be in a strong enough negotiating position to demand a larger stake.

● Mr Marcel Roulet, France Telecom's chairman. When he tried to join Syncordia earlier this year, he was rebuffed by BT, which seems to want to keep as much of the venture in its own hands as possible. "We wanted to get in but not on any conditions. BT said that wasn't possible," he says.

Mr Roulet is also concerned that his existing joint venture with DT to develop advanced telecommunications services could be undermined if the German company is successfully wooed by BT. His strategy seems to be to build on the existing alliance with the Germans and then to bring in one of the leading US carriers as a partner to set up a rival Syncordia.

● Mr Bob Allen, chairman of AT&T which, even after its break-up in 1984 remains the most formidable force in the world telecommunications industry. He views BT's establishment of Syncordia in AT&T's backyard as an aggressive move. "BT has made no bones about being in US markets," he says.

Mr Allen's stated goal is for AT&T to generate half its revenue outside the US by the year 2000 when he retires. But he is also ambivalent over how aggressive to be, realising that, so long as foreign markets are not fully open, AT&T will need to co-operate with other local telephone companies. "We are all neophytes in the international market and we are all seeing that partnerships will be



### British Telecom

Set up Syncordia in US to provide global communications to multinationals

MCI Leading shareholder of Infonet (11 partner companies including Deutsche Telekom, France Telecom, Swedish Telecom, PTT Netherlands, and KDD of Japan) which provides data communications services

Deutsche Telekom/France Telecom Set up joint venture to develop value-added services

Swedish Telecom/PTT Netherlands Set up joint venture called Sincordia to provide global communications to multinationals

Cable and Wireless About to launch Planet via the Global Digital Highway. Planet will provide business services over GDN which will provide global network of fibre optic cables

POSSIBLE LINKS

BT Talking to Deutsche Telekom and NTT of Japan about taking stakes in Syncordia

Deutsche Telekom Talking to France Telecom and AT&T of US and MCI about forming alliances to provide global communications services

France Telecom Talking to Deutsche Telekom and to MCI about global communications services

Unicom Talking to MCI and AT&T about finding a US partner for their alliance

Also talking to other Scandinavian and Benelux countries

MCI Talking to partners in Infonet about expanding into voice and image services

needed," he says.

● Mr Bert Roberts, president of MCI, AT&T's most successful rival in the US. He is trying to stop BT forming a link with Deutsche Telekom and NTT. He wants to cement his own global alliance.

Mr Roberts uses two arguments in discussions with DT's Mr Rieke and others. First, that unlike BT and AT&T, MCI does not represent a threat to its partners because it is much smaller. Second, that Syncordia will fall in the important US market unless it takes on an American partner. He rates BT's chances as "zero, none, negative".

Mr Roberts plans to expand the remit of Infonet, MCI's global data communications joint venture with 11

other carriers, including the French and the Germans, so that it becomes something like Syncordia. But he is considering other schemes as well: "I have many irons in the fire," he says.

● Mr Haruo Yamaguchi, NTT's chairman. Although it has the largest stock market capitalisation of any carrier, NTT remains something of a sleeping giant in international markets. NTT only runs Japan's domestic network.

There are doubts over whether NTT would be allowed by the Japanese authorities to join one of the alliances because of the traditional separation of domestic and international telecommunications in the country. But, says Mr Yamaguchi: "We are presently studying and considering Syn-

cordia... Our interpretation is not that we cannot make an investment but that we need to have discussions with our authorities."

● Lord Young, chairman of Cable and Wireless. The company has positions in the main markets: it owns Mercury, the UK's second carrier; controls most of Hong Kong Telecom; has a minority stake in IDC, Japan's second-largest international operator; has shares - along with a series of partners - in a network of fibre-optic cables spanning the world's oceans, dubbed the "Global Digital Highway"; and is the fifth-largest US long-distance carrier.

C and W is about to launch Planet, its answer to Syncordia. But, for all the geographical breadth of the company's operations, Lord Young seems aware that they are thinly spread and is anxious to avoid a head-on clash with the likes of AT&T and BT.

● Others. Some of the smaller carriers are concerned that, as the giants form alliances, they could become marginalised. As Mr Västström Vucins, managing director of Swedish Telecom International, puts it: "If you share a stable with a horse and you are a chicken, you had better watch out."

To avoid getting squashed, Swedish Telecom last week pooled most of its international business in a joint venture, called Unicom, with PTT Netherlands, the Dutch state-owned carrier. The two are now seeking to expand the venture to include other Nordic and Benelux carriers with the aim of making themselves attractive enough collectively to sign up partners in north America and the Far East to provide business communications services.

IBM, the world's largest computer group with extensive interests in data communications, is also a possible player. Ms Ellen Hancock, the company's general manager for network services, says she has no intention of being in the "common carrier" business but that she is interested in forming alliances with telephone companies under which they would work together to provide companies with global communications services.

Despite all the negotiations among the carriers, answers to three central questions remain uncertain.

First, what will be the scope of the alliances? Syncordia aims to take over the running of multinationals' internal networks, supplying them with voice, data and video communications. It claims that it will be providing a network which is more integrated, seamless and flexible than anything currently on offer.

But it is still unclear how much Syncordia's services will differ from existing "one-stop shopping" arrangements among the carriers to cater for multinationals' needs. It is also unclear which company would end up controlling the customer if DT and NTT were finally persuaded to join. Would a German customer such as Daimler-Benz be BT's, DT's or the venture's customer?

Second, how aggressive will the carriers be? They are clearly wary of damaging the traditional co-operative arrangements which have given them such a high level of profits, put collectively at \$20bn a year, from international calls. As the chairman of one of the carriers puts it: "What BT has demonstrated is the ability to alienate the rest of the club without any practical benefits."

But the carriers also know that the international cartel is crumbling and those who move first stand the best chance of creating the relationships that will ensure success in the longer term.

Third, will the user gain? If a series of competing global alliances emerges from the negotiations, users should benefit from better, more integrated services and from lower prices. But if the alliances result in restricting competition the cartel will simply have succeeded in restructuring itself in a different guise.

## Troublesome piece

It is quite appropriate that Meyerbeer's opera *Les Huguenots*, which opened the present Royal Opera House, Covent Garden in 1858, should this week have closed it, however temporarily. The opera's long production, the first for over sixty years, has been cancelled and the house orchestra, pursuing a pay claim, has been locked out by a management pleading poverty.

A century ago *Les Huguenots* was just about the most popular opera in the repertoire. Things began to go wrong in the 1890s. It was scheduled to be performed in Berlin on the night that Hitler came to power but that production too was cancelled: Meyerbeer was Jewish.

This version, by John Dew, has suffered a succession of setbacks. He attempted to make the tale of religious persecution, relevant by transposing the setting to contemporary Germany, with two sides divided by The Wall. German reconciliation made a nonsense of that so Dew shifted it to an equally intractable arena for the London production-Belfast, with its endless religious strife. But strife was not confined to the setting. Early in rehearsals the French soprano Françoise Pollet walked out, complaining that she knew a jolly sight more about the opera than the cond actor, David Atherton. Now the orchestra has struck.

It bases its claim for more cash around the fact that Meyerbeer's original opera lasted five hours and had four intervals. Even though Dew halved the duration the orchestra wanted its breaks-expanding it well into overtime land.

## Granada bound

■ Gerry Robinson, 43 tomorrow, is even younger than Derek Lewis, the man he is replacing as Granada's chief

executive. The latter, probably unfairly, has carried the can for many of the TV and leisure conglomerates problems, while Robinson has a reputation which will be hard to live up to.

Robinson's big advantage is that he is a wealthy and successful businessman with no particular loyalties. And now that Granada has held on to its TV franchise and had its rights issue, it is in position to be knocked into shape by an outsider.

The downside is that Granada is a much bigger and more complicated business than Compass and Robinson's own record - namely the abortive bid for Sketchley - is not without its critics.

But the key issue, which will determine Robinson's fate, will be his relationship with Alex Bernstein, the long-standing chairman. Granada sometimes seems as if it is still run like a family business and it will be up to Robinson to prove that this is not the case, even if it means parting company with the beloved Granada TV operation.

## Breath-taking

■ One reason the British aren't enthused by Franco-German proposals for a European "Common Foreign and Security Policy" is that the phrase is such a mouthful and the initials are unmemorable. It sounds much better in German, where *Gemeinsame Aussen- und Sicherheitspolitik* comes out as GASP.

## Back to work

■ George Russell, the chairman of the Independent Television Commission, is not the only person who will be glad that the brouhaha over the awards of the new ITV

## OBSERVER



"I find your behaviour offensive, humiliating and a day late."

franchisees is over. Shareholders in Marley, the building products group he chairs, must also be hoping that now they will be able to count on his full-time attention.

A former visiting professor at Newcastle University, Russell has sat on boards inquiring into everything from civil service pay to local authority business, in addition to holding down a series of tough jobs in the private sector. His skilful handling of the TV franchise lottery has proved beyond doubt that the 55-year-old geordie is a safe pair of hands.

But Marley is a company that needs full-time attention and recently Russell has given the appearance of being a part-time boss. The group's profits have fallen from a peak of £70m to £14m last year and will be hardpushed to top £30m next year.

Admittedly, Marley has been hit by the severe recession in the UK, but Russell's time at the top of Marley has hardly been the most impressive

episode on his cv. Marley is the fourth in a series of turnaround operations, he has tackled and his magic is taking longer than expected to work. It has not gone unnoticed that he gets £281,000 a year from Marley, and has lots of share options but no direct shareholding, whereas the ITC job only pays £37,399 a year.

## Spy ring

■ Markus Wolf, ex-head of East Germany's vaunted HVA spy network, has received support from an unexpected quarter. Herbert Hellenbroich, former head of the BND, West Germany's intelligence agency, claims the German justice authorities were "entirely wrong" in seeking to put Wolf on trial.

After German unification it was impossible to distinguish between good spies in the West and evil spooks in the East, he said during a weekend TV talk show with Wolf. The latter, out on bail after recently turning himself in to the German authorities, looked suitably appreciative.

For a man whose only photo in the West until 1978 consisted of a fuzzy snapshot taken of him while contacting an agent in Stockholm, Wolf is now instantly recognisable from his frequent appearances in the media.

As deputy head of the hated Ministry of State Security (Stasi) under Erich Mielke (currently on bail), the 68-year-old ex-spy is far from convincing when he claims that he had not known about the Stasi's massive human rights violations. However, a few more testimonials like Hellenbroich's and all this could change.

## Blackout

■ How many social workers does it take to change a light bulb? None. 12 of them form a working party to write a policy paper "Coping with Darkness".

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**Paul Betts on the UK company's struggle to win orders in a depressed civil aviation market**

**Chief executive Sir Ralph Robins with Rolls-Royce-powered 747s: 'We must keep our nerves'**

5

Will there still be room for three leading engine makers? Many believe it would be a logical step for Rolls-Royce to team up eventually with Pratt & Whitney in the big engine market to compete against the GE-Snecma combination. The answer, however, will ultimately lie with the airlines.

allowing governments and international organisations to set standards. The result will be the most cost-effective use of fossil fuels. The growth in energy sales might eventually slow down but, overall, there would be no regrets. The policy pays off even if the warnings about atmospheric damage turn out to be false. "No regrets" is not without its problems, but it does not interfere with the market or growth and it seems to cost

infrastructure transfers were not a popular topic at the weekend. There were, however, a number of suggestions for tying debt rescheduling, or GATT concessions, to the freeing of markets. As to a tax on CO<sub>2</sub>, there was much debate about the European Community's proposed impost of a lightweight \$3 per barrel in 1993, to be increased by a dollar a year until it reached \$10 at the turn of the century. The consensus seemed to be that it was neither desirable, nor likely to work.

It looks as if the iceberg will have to be visible before the brilliant engineers who designed the Titanic offer their regrets.

which are themselves below the international average.

The real test of Waterfront Reform is whether prices to the shipper, and ultimately the consumer, fall through a combination of increased competition, removal of restrictive practices and improved efficiency. Ask any shipper in Australia for his opinion of these success criteria and he will give you the "thumbs down" to the Waterfront Reform process in Australia.

Nicholas Finney,  
*The Waterfront Partnership,  
36 Grosvenor Gardens,  
London SW1W 0EB*

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Writ claims individuals and businesses breached US securities and racketeering laws

## Lloyd's faces huge suit by US Names

By Richard Lapper in London

SEVERAL hundred individuals and businesses in the Lloyd's of London insurance market were yesterday cited in a writ filed in New York alleging breaches of US securities and racketeering laws.

The writ, by 64 of the insurance market's US members or Names - the individuals whose assets support underwriting - alleges that Lloyd's and its agents broke the law by misrepresenting risks faced by potential investors in the market.

The Names, who face losses of more than \$3m since 1988, allege Lloyd's violated the 1933 Securities Act offering an investment - membership of Lloyd's - to Americans without registering with the Securities and Exchange Commission.

It is also alleged that misrepresentation of the risks faced by Names was so systematic that Lloyd's breached the Racketeer-Influenced and Corrupt Organisations (RICO) law.

Under RICO, courts can award damages three times as great as in other cases. RICO can be applied to 1988 losses; a three-year statute of limitations applies under the securities law.

The action is by far the biggest of three actions so far filed in the US by loss-making Names and is causing some concern at the beleaguered London market, which is already engulfed in a tide of litigation from UK Names.

More than 10 per cent of the market's members are involved in law suits, mostly alleging negligence by their agents.

The market's governing Council, 288 of its 350-plus syndicates, 16 members' agents and 43 managing agents are named in the writ which the New York law firm, Proskauer Rose Goetz & Mendelsohn, said it was expecting to file in US District Court in Manhattan.

According to Proskauer Rose, the defendants have "downplayed the practical impact" of the Names' unlimited liability - the principle whereby Lloyd's Names are liable for all their insurance losses - and "misrepresented" or "failed to disclose serious risks in plaintiffs' syndicate investments".

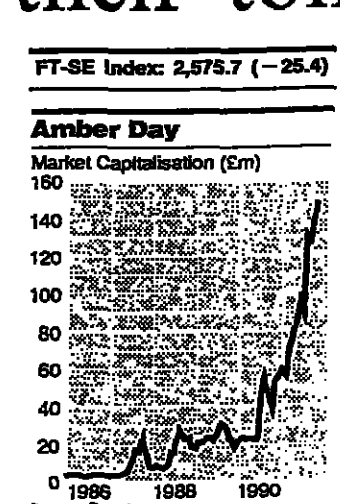
The plaintiffs allege that they were denied participation in profitable syndicates, that "secret and excessive compensation" was paid to insiders and that reinsurance coverage for many of their syndicates was inadequate. Lloyd's argues that the UK rather than the US is the correct legal forum for any dispute between Names and their agents.

Mr Don Green, of Le Boeuf, Lamb, Leiby & MacRae, the New York law firm representing Lloyd's, said "the suit is going to be vigorously defended" and alleged that the plaintiffs aimed to "intimidate Lloyd's politically".

There are worries at Lloyd's about the potential damage that a protracted legal dispute - together with the prospect of a possible investigation by a Senate committee - could inflict on its reputation in the US, which generated in 1990 nearly 40 per cent of premium and 10 per cent of its capital.

In 1990, 2,055 of the 26,500 Lloyd's Names were Americans. Mr David Robson, managing director of Market Syndicates, the Lloyd's agency, said he did not believe that the Names' case had any basis, but admitted the market was concerned. "It could be that a US judge could kick over the traces somewhere and come up with some amazing judgment. Ultimately there is a fear of the rationality of the US legal system."

Yesterday's downward twitch in the London markets seems further confirmation of the power of the opinion polls to dominate investors' thinking. Weekend reports of a 7-point Labour lead over the Tories had a predictable effect on sterling and the gilt market, thus bringing the unnerving reminder that UK interest rates can go up as well as down. The poll also formed a depressing backdrop to yesterday's retail sales figures, which suggested that whatever is going to restore the government's popularity, it is scarcely going to be an upsurge in consumer spending.



challenge is to breathe new life into a somewhat ill-focused group whose rental activity - responsible for half the pre-tax profit - appears to have stopped growing. The truncated leisure side can obviously cash in on any economic upturn, but the recovery potential from computers looks limited and the return on the BSKyB investment will be some time coming.

Granada should make £70m-£75m pre-tax for the year just ended, with £30m-£100m possible for the 12 months to September 1992. That gives an above average rating, which the uncertainties scarcely seem to justify.

## Yilmaz offers resignation after Motherland party's narrow defeat

### Demirel to head Turkish coalition

By John Murray Brown in Ankara

MR MESUT YILMAZ, Turkey's prime minister, yesterday offered his government's formal resignation after the ruling Motherland party's narrow defeat in Sunday's general election after eight years of government.

The announcement paves the way for Mr Suleyman Demirel's True Path Party (DYP) to be asked to form a new government.

With almost all the votes counted, Mr Demirel last night had 184 of the 450 seats in parliament, the Motherland party 112 seats, the Social Democratic Populists 64, the Islamic-backed Welfare party 63 and the Democratic Left party seven seats.

Mr Demirel could form a coalition with any one of three leading parties. The most likely alliance partner would be the Motherland Party, Turkey's other centre-right party.



Suleyman Demirel, former premier and True Path party leader, prepares for victory

Diplomats said there would be a strong logic to a coalition between the two parties. There is little difference in policy both are committed to market based economic reform and a continuation of Turkey's close relations with the US and other fellow Nato countries.

Mr Demirel yesterday appeared to rule out an alliance with the Social Democratic Populists, while most analysts believe a link with the

Islamic party would be opposed by True Path's moderate secular politicians.

The problems over forming a coalition are likely to result in a period of political uncertainty.

"I've seen so many elections, but I have never been in so much uncertainty as we have now," said six-times prime minister Mr Demirel. He was twice ousted by Turkey's generals, most recently in 1980

when the army ended years of left-right violence and political paralysis caused by unstable coalitions.

In addition, Mr Demirel has pledged to oust President Turgut Ozal, the former Motherland party prime minister who in 1989 used the party's parliamentary majority to have himself elected president, a vote boycotted by both opposition parties in parliament.

Mr Ozal has made it clear

that he has no intention of resigning. Mr Ozal, who was elected in 1989 and still has five more years of his term to run, said at the weekend that "whatever the outcome is, my situation will not be affected".

Mr Demirel yesterday conceded that the election result made it hard for him to resolve "the Cankaya problem," referring to Mr Ozal's Ankara palace.

## Cresson confines ministers to Paris

By William Dawkins in Paris

MRS EDITH CRESSON, the French prime minister, yesterday told members of her government that they cannot leave Paris without getting clearance from her office first.

The security order, last taken during the Gulf War, comes in response to the growing number of violent demonstrations against government ministers by farmers, who are angered by declining prices and probable EC agriculture policy reforms.

It is a result of a crisis meeting called over the weekend by President Francois Mitterrand with Mrs Cresson and the justice and interior ministers to discuss measures to restore the authority of the state and public order. The order aims to avoid unnecessary and potentially humiliating encounters between ministers and striking farmers.

On Friday evening more than 200 farmers burst into a reception being attended in Moissac, south-western France, by Mr Jean Michel-Baylet, the tourism minister, and overturned the tables for the banquet that was to follow.

Earlier this month, Mr Michel Charasse, the budget minister, had to be protected by two armoured cars and three mobile police squadrons as he opened a public building in Joz, central France. Other ministers' cars have been pelted with eggs and vegetables, and several have been obliged to change or cancel visits to the provinces.

From now on, government ministers need to obtain authorisation from Mr Ivan Barbot, the prime minister's internal security adviser, for visits outside Paris. The aim appears to be to co-ordinate visits to avoid provocation.

Mr Pierre Berégovoy, the finance minister, yesterday condemned the latest in a series of attacks by farmers on public buildings and government offices. "No demand can justify these excesses," he said.

This week, the government faces a series of public sector pay and conditions strikes, further increasing the pressure on Mr Mitterrand and Mrs Cresson whose popularity continues to decline, according to the latest polls.

Industrial action is planned by nurses, hospital doctors, urban transport workers and dockers, culminating in a general public service stoppage on Thursday, in protest against the government's economic policies.

This comes at a time when the police face public criticism for using teargas and water cannon to suppress a demonstration by nurses last week, yet failing over the past month to keep the farmers under control.

## Talks on free trade zone close to success

By David Gardner in Luxembourg

NEGOTIATIONS to create a 19-nation free trade zone between the EC and the European Free Trade Association (EFTA) were close to success last night, although Greece was insisting on further concessions over transit licences.

The EC Twelve and the seven-nation EFTA parred their outstanding differences to what looked like bridgeable gaps on the amount of extra cod Norway would make available from its waters, and the amount of "cohesion" aid and soft loans EFTA would provide to help the EC's poorer members catch up.

Despite initial fears that Italy would hold out against a heavy lorry transit deal with Switzerland, agreement was reached for unlimited passage for EC trucks up to 28 tonnes.

In addition, up to 50 trucks of up to 38 tonnes will be able to transit each way through Swiss passes daily, provided they are under two years old,

France last night confirmed what amounts to a U-turn on EC farm reform when Mr Louis Mermaz, the French agriculture minister, said Brussels' proposals to reform the Common Agricultural Policy were "going in the right direction." Mr Ignaz Kiechle, the German farm minister, also volunteered agreement with reservations to the European Commission's reform plan. Mr Ray MacSharry, EC agriculture commissioner, said both ministers "accepted 100 per cent the philosophy and principles of the Commission's proposals and the only remaining issues are of detail." However, the extent to which the Franco-German stance would break the Uruguay Round deadlock was unclear as both insisted on adequate border protection against imports as the price of reform.

Foreign Ministers, where unanimity is required, are being brought to bear on Greece last night, not least because it sent a senior official instead of a minister to the Transport Council, with little autonomy to negotiate.

Angry officials from both the European Commission and the Dutch presidency of the EC pointed out that if Greece scuppered the EEA treaty it would still gain from increased transit rights since that agreement would go through independently.

After three previous failures to agree on an EEA, the meeting was considered a last opportunity before the EC gets swamped by its own political and economic union agenda, and EFTA members led by Austria and Sweden abandoned attempts at a halfway house to EC accession and opted instead to seek full membership.

carrying perishable goods, and rail transport capacity is full.

But the more intractable negotiations with Austria were last night in limbo. Austria finally agreed to issue 1.3m transit licences for EC heavy lorries. This would freeze the level of permits for all members except Greece, which would get a 25 per cent

increase to 60,500 licences a year. The Greeks, however, insisted on 63,000 permits.

EC transport ministers voted through the package against Greece's sole objection, under provisions for weighted majority voting. But it remained possible that Greece would veto the European Economic Area (EEA) treaty in the Council of

## Jerry Brown enters race for US president

By Lionel Barber in Washington

MR JERRY BROWN, the former governor of California whose eccentricities earned him the nickname "Governor Moonbeam", yesterday entered the race for the Democratic presidential nomination in 1992.

Mr Brown, 53, who ran for president in 1976 and 1980 with diminishing returns, is a long-shot candidate who has refused to accept more than \$100 a time in individual campaign contributions. But his promised crusade against what he calls "the unholy alliance of private greed and corrupt politics" in Washington could strike a chord among voters.

Mr Brown is the sixth major Democrat to enter the 1992 campaign. Other prospective candidates, notably Governor

Mario Cuomo of New York and the Rev Jesse Jackson, are expected to announce by the end of November if they will throw their hats into the ring.

The entry of Mr Cuomo, a political heavyweight, would transform the Democratic race. The New York governor's final intentions remain unclear, but the weak US economy and voter dissatisfaction with President George Bush's record on domestic issues have spurred Mr Cuomo to consider a presidential bid.

Mr Brown, speaking yesterday at Independence Hall in Philadelphia, cast his candidacy in terms of leading a grassroots crusade against routine politics which, he argued, was hastening the country's decline.

"Our deteriorating economy, our collapsing political process, and our eroding sense of common values are the direct consequences of a few allowed to satisfy their appetites for greed and privilege," he declared in an attack on Democrats and Republicans alike in Washington.

Mr Brown's two terms as governor of California between 1974 and 1982 were marked by quixotic appointments and a notoriously short attention span. A flirtation with Zen Buddhism in the mid-1980s did not help his cause.

Two years ago, Mr Brown returned to politics, serving as state Democratic party chairman in California. The office ought to have enabled him to build contacts for next year's

California Democratic primary, which - if moved forward in the election calendar - could settle the race for the nomination.

However, Mr Brown is widely believed to have made enemies, after failing to organise on behalf of Mrs Dianne Feinstein, the Democratic candidate who narrowly failed to win the governor's race last year.

Several other Democratic candidates, led by Governor Bill Clinton of Arkansas and Senator Bob Kerrey of Nebraska, are adopting populist positions similar to those of Mr Brown, whose penchant for original ideas and bad organisation has invited comparisons with Mr Jackson.

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WORLDWIDE WEATHER									
Alexandria	F	17	17	17	17	17	17	17	17
Amman	F	17	17	17	17	17	17	17	17
Antwerp	F	17	17	17	17	17	17	17	17
Athens	F	17	17	17	17	17	17	17	17
Bahia	F	17	17	17	17	17	17	17	17
Bangkok	F	17	17	17	17	17	17	17	17
Beijing	F	17	17	17	17	17	17	17	17
Bombay	F	17	17	17	17	17	17	17	17
Buenos Aires	F	17	17	17	17	17	17	17	17
Calcutta	F	17	17	17	17	17	17	17	17
Cardiff	F	17	17	17	17	17	17	17	17
Cairo	F	17	17	17	17	17	17	17	17
Canberra	F	17	17	17	17	17	17	17	17
Cebu	F	17	17	17	17	17	17	17	17
Dakar	F	17	17	17	17	17	17	17	17
Damascus	F	17	17	17	17	17	17	17	17
Delhi	F	17	17	17	17	17	17	17	17
Dhaka	F	17	17	17	17	17	17	17	17
Dili	F	17	17	17	17	17	17	17	17
Djibouti	F	17	17	17	17	17	17	17	17
Doha	F	17	17	17	17	17	17	17	17
Dublin	F	17	17	17	17	17	17	17	17
Durham	F	17	17	17	17	17	17	17	17
Edinburgh	F	17	17	17	17	17	17	17	17
Geneva	F	17	17	17	17	17	17	17	17
Hamburg	F	17	17	17	17	17	17	17	17
Helsinki	F	17	17	17	17	17	17	17	17
Istanbul	F	17	17	17	17	17	17	17	17
Jakarta	F	17	17	17	17	17	17	17	17
Kuala Lumpur	F	17	17	17	17	17	17	17	17
London	F	17	17	17	17	17	17	17	17
Los Angeles	F	17	17	17	17	17	17	17	17
Madrid	F	17	17	17	17	17	17	17	17
Moscow	F	17	17	17	17	17	17	17	17
Nairobi	F	17	17	17	17	17	17	17	17
Paris	F	17	17	17	17	17	17	17	17
Rangoon	F	17	17	17	17	17	17	17	17
Reykjavik	F	17	17	17	17	17	17	17	17
Riyadh	F	17	17	17	17	17	17	17	17
Singapore	F	17	17	17	17	17	17	17	17
Sofia	F	17	17	17	17	17	17	17	17
Taipei	F	17	17	17	17	17	17	17	17
Tokyo	F	17	17	17	17	17	17	17	17
Ulaanbaatar	F	17	17	17	17	17	17	17	17
Vladivostok	F	17	17	17	17	17	17	17	17
Yokohama	F	17	17	17	17	17	17	17	17
Zurich	F	17	17	17	17	17	17	17	17

Temperatures at midday yesterday: C-Cloudy D-Drizzle F-Fair Fg-Fog H-Hail R-Rain S-Sunny B-Storm T-Thunder



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# FINANCIAL TIMES COMPANIES & MARKETS

Tuesday October 22 1991

**IVECO**  
**Ford**  
**TRUCK**

## INSIDE

### Retailer's discount chain puts it ahead

Amber Day, the UK retail group more than trebled its profit last year thanks to its What Everyone Wants discount chain. Its 44 shops in Scotland and the north of England, including six opened during the year, contributed £13.1m (£22.5m) operating profit. Page 30

### Newspaper group hit

Southern Newspapers, the UK regional publisher, said pre-tax profit fell to £8.61m (£14.8m) from £15.05m as the recession in the south of England hit advertising revenues during the year to end-June. However, Mr John Salkend, chairman, said the outlook was brighter, with revenues stabilising. Page 30

### Americas rediscovered

The Americas were rediscovered by investors last week, coinciding with the US celebration of Columbus Day. Wall Street, Canada and Mexico were three of the best performing markets, according to the FT-Aktuaries World Index. The American rally helped the World Index to rise 2 per cent on the week in local currency terms. Back Page

### Small is beautiful for farmers

Very small farms constitute more than 40 per cent of all agricultural holdings in the UK, according to a recently-published study. It produced some odd conclusions. Of the UK's 240,000 holdings, at least 100,000 fall into the very small farm category. They are of negligible agricultural significance, accounting for only 2 per cent of production. Should these be classed as farms at all? Who are these 100,000 small farmers and what do they do? Page 34

### Shifting into a faster gear

David Brown, the Huddersfield engineering company which was gear maker to the world for 130 years, has lurched from one financial crisis to the next. Mr Chris Cook (left), who replaced Mr Chris Brown, bought the company for £48m in 1980, said: "Despite 20 years of mismanagement we still have a group which is a world leader with huge underlying strengths in its technology, skills and name." Page 31

**Bidding for Australian licence**  
Kalori Communications, the consortium bidding for Australia's second telecommunications licence, may lose the support of France Telecom and Ameritech and Bell Atlantic of the US. Page 25

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### Chief price changes yesterday

MANCHESTER (DSE)		Southwest Air	24	-
Amber Day	259	PALES (FPP)	24	-
Bombardier	154	Ricoh	24	-
Unilever	284	Amst Europe	24	-
Schneider	557	Amst Europe	24	-
Amst Europe	725	Amst Europe	24	-
Amst Europe	725	Amst Europe	24	-
Amst Europe	725	Amst Europe	24	-
Amst Europe	725	Amst Europe	24	-
Amst Europe	725	Amst Europe	24	-

### New York prices at 12.30

Amber Day	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-
Amst Europe	125	Amst Europe	24	-

## Mannesmann buys stake in instrument maker

By David Waller in Frankfurt

MANNESMANN, the German steel and engineering group, is moving further into car components with the acquisition of 51 per cent stake of the voting shares of VDO Adolf Schindling, a Frankfurt-based manufacturer of instrument systems for cars and aircraft which has been family-controlled since the 1920s.

Terms of the purchase were not disclosed, although analysts speculated that Mannesmann had paid more than DM200m (£125m) for the majority holding in a company which is a world leader in its niche markets, with sales of more than DM2.3bn last year.

The acquisition comes less than two months after Mannesmann won control of Boge, a German manufacturer of struts and shock absorbers, and reflects Mannesmann's determination to diversify away from its traditional steel businesses.



Hydraulic systems: the group is diversifying

## Sanwa launches unit trusts in the UK

By John Authers in London

SANWA International, the Japanese bank, today launched 10 authorised unit trusts in the UK, the first entry by a Japanese institution into the UK unit trust industry. It is also the highest number of unit trusts to be simultaneously launched by one company.

The move surprised observers: the unit trust industry was severely damaged by the Black Monday fall of October 1987, and has still not fully recovered. It is also widely thought that there are too many unit trusts on the market - more than 1,400, managed by more than 100 groups.

Sanwa is based in Osaka, rather than Tokyo and its traditional base is in retail banking, rather than fund management. However, Sanwa has had a base in London since 1973 and internationally it has around \$8bn in funds under management. It is the world's fifth largest bank in terms of asset size.

## NatWest Bancorp loss hits \$65.7m

By Alan Friedman in New York

NATIONAL Westminster Bancorp, the wholly-owned US subsidiary of Britain's National Westminster Bank, yesterday revealed a third-quarter loss of \$65.7m.

The subsidiary has been hit by property loan problems, including its exposure to Mr Donald Trump, the property and casino developer.

Return on capital for the first nine months was 3 per cent compared with 17.9 per cent for the same period of 1990, while there was a 4.5 per cent decline in net sales to \$K20.07bn from \$K21.06bn while third-quarter sales were \$K16.28bn compared with \$K16.37bn in 1990.

Over the first nine months there was a 4.5 per cent decline in net sales to \$K20.07bn from \$K21.06bn while third-quarter sales were \$K16.28bn compared with \$K16.37bn in 1990.

## SKF declines 95% after nine months

By Robert Taylor in Stockholm

SKF, the world's leading rolling bearings manufacturer, has announced a 95.2 per cent drop in profits (after financial items) for the first nine months of the year to \$K1.85m (\$13.8m) compared with \$K1.78bn for the same period of 1990.

There was a slight recovery in the third quarter to \$K2.22m from \$K1.84m in the second quarter. However, this was much lower than the \$K4.35m (after financial items) in the third quarter of last year.

Return on capital for the first nine months was 3 per cent compared with 17.9 per cent for the same period of 1990, while there was a 4.5 per cent decline in net sales to \$K20.07bn from \$K21.06bn while third-quarter sales were \$K16.28bn compared with \$K16.37bn in 1990.

Over the first nine months there was a 4.5 per cent decline in net sales to \$K20.07bn from \$K21.06bn while third-quarter sales were \$K16.28bn compared with \$K16.37bn in 1990.

## Siemens to pay DM2bn for the rest of Nixdorf

By Andrew Fisher in Frankfurt

SIEMENS of Germany has decided to tighten its control over the ailing Nixdorf Computer company, which it rescued last year, by raising its stake from the present 78 per cent of the combined voting and preference stock to 100 per cent at a cost of nearly DM1.5bn (\$1.1bn).

In SN's first full business year to September 30, 1991, it booked incoming orders of DM13bn, 9 per cent more than the previous Siemens and Nixdorf operations combined.

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	Italy	
	Malaysia	
	Norfolk	
	Singapore	
	Thailand	
	United Kingdom	

## Lafarge plans Spanish expansion

By Tom Burns in Madrid and William Dawkins in Paris

LAFARGE COPPEE, France's largest cement and construction materials group, plans to continue its expansion in Spain by taking a large stake in Tessa, a FFR1bn (£173.6m) per year turnover building products group.

Lafarge Nouveaux Matériaux (LNM), the French group's pre-mixed construction materials division, yesterday said it had taken an option to buy a 49 per cent stake in Tessa. The deal, due to be finalised by the end of the year, is worth Pta2.5bn to Pta3.3bn (\$25.5m to \$33.5m), said Madrid stock market observers.

Lafarge said LNM "confirms its interest in the growth prospects of the Spanish market, due to the rapid development of modern construction techniques".

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A high-contrast, black and white photograph of a wooden chair with a slatted back, positioned in a dark room. The chair is illuminated from the left, casting a strong shadow on the wall behind it. The image has a grainy, high-contrast quality.


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**NOTICE OF ANNUAL GENERAL MEETING**  
The Annual General Meeting of Shareholders is to be held at the registered office of the Company on Friday November 15th, 1991 at 11:30am (or as soon thereafter as it may be held) and for the following purposes:

- 1) To receive and adopt the Directors' Report of the Auditor for the period to 31st July 1991.
- 2) To receive and adopt the Statement of Net Assets and the Statement of Operations for the period to 31st July 1991.
- 3) To grant a discharge to the Directors in respect of their duties for the period ended 31st July 1991.
- 4) To grant a discharge to the Auditors in respect of their duties for the period ended 31st July 1991.
- 5) To re-elect Messrs Dennis, Lane, Pausy and Wilmar as Directors of the Company.
- 6) To re-appoint Messrs Price Waterhouse as Auditors.
- 7) Miscellaneous.

**Voting**  
Shareholders are advised that in accordance with the Articles of Incorporation the Annual General Meeting of Shareholders will require a quorum of 10% of the shares outstanding.

**Voting Arrangements**  
In order to vote at the meeting the holders of Bearer shares must deposit their shares not later than 12th November 1991, either at the registered office of the Company, or with any bank or financial institution acceptable to the Company and the relative Deposit Receipts (which may be obtained from the registered office of the Company) must be forwarded to the registered office of the Company to arrive not later than 12th November 1991. The shares so deposited will remain blocked until the day following the Meeting or any adjournment thereof.

The holders of registered shares need not deposit their certificates but can be present in person or represented by a duly appointed proxy.

Shareholders who cannot attend the meeting in person are invited to send a duly completed and signed proxy form to the registered office to arrive not later than 12th November 1991.

Proxy forms will be sent to registered Shareholders with a copy of this Notice and can be obtained from the registered office.

The Board of Directors

## GROUPE MOULINEX

Turnover as at  
30th September, 1991

The Group's sales, which include Krups since January 1991, totalled 5,500 million French francs as at 30th September, 1991.

On a comparable basis (excluding Krups) turnover rose by over 15%. This increase is attributable mainly to business activity outside France. Sales in France, which account for 20% of the Group's turnover, rose by 4.8%.

The Group expects to attain its year-end sales objectives in spite of the fact that the international economy appears to be less active than expected.

Turnover (in millions of French francs)	Including Krups 1991	excluding Krups 1991	1990	%
Consolidated turnover	5,507	4,389	3,787	+15.9%
Moulinex S.A. turnover	—	3,546	2,783	+27.4%

## INTERNATIONAL COMPANIES AND FINANCE

### Telecoms trio expected to drop Australian bid

By Kevin Brown in Sydney

FRANCE TELECOM and Ameritech and Bell Atlantic of the US are expected to withdraw shortly from Kalori Communications, one of two consortia bidding for Australia's second telecommunications licence.

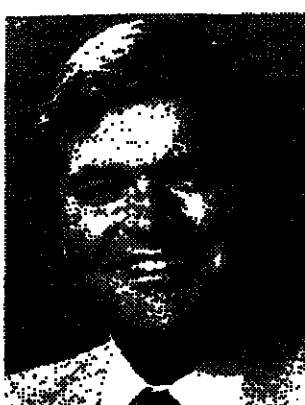
Hutchison Whampoa of Hong Kong, the remaining member of the consortium, is expected to proceed with the bid, but the withdrawal of its French and US partners increases the likelihood that the second licence will be awarded to the rival Optus Communications consortium.

Optus is owned by BellSouth of the US and Cable & Wireless of the UK, each holding 24.5 per cent, and Mayne Nickless, an Australian transport group, with 30 per cent. Australian institutions hold the balance.

The second licence will be awarded to the winning bidder for Ausnet, the government's loss-making satellite company. The privatised Ausnet will compete with a government-owned carrier formed by a merger of Telecom Australia, the main domestic carrier, and OTC, which handles international traffic.

Earlier this year, the government announced the duopoly would last until 1997, giving the second carrier five years to establish itself before Australia moves to open competition in telecommunications.

Optus has emerged as



Kim Beazley may have to resolve dispute

favourite to win the licence after promising to spend A\$4bn (US\$3.2bn) over five years to provide competitive STD and ISD access to all Australians, and a digital cellular service to 80 per cent of the population. It says it will achieve a 21 per cent share of the domestic and long distance market for residential and small business customers by 1997, and more than 30 per cent of the cellular market.

Withdrawal of three of Kalori's four partners is embarrassing for the federal Labor government, which needs to demonstrate to opponents of privatisation that it can achieve a high price for Ausnet. It follows tortuous negotia-

tions between Telecom Australia and both consortia over the interconnect fee - the price to be paid by the second carrier for access to Telecom's trunk lines.

The level of the interconnect fee is crucial to the second carrier's prospects of viability and to Telecom/OTC's ability to defend its market share against competitors.

Compromise recommendations by Ausnet, the industry's supervisory body, were rejected by both consortia, but neither has been unable to reach agreement with Telecom, raising the prospect that Mr Kim Beazley, the communications minister, may have to resolve the dispute.

Kalori's US partners are thought to have concluded there was little prospect of profitable investment in Australia, partly because of the government's plans to move quickly to open competition.

Both companies are part owners of Telecom New Zealand, which was privatised earlier this year, but are understood to have identified few possibilities for synergy between the two countries.

Hutchison said it would table a bid for Ausnet by the government's deadline of November 8 and indicated it would announce a strategic link with an overseas manufacturer telecommunications equipment.

### Kao warns of slower domestic growth

By Robert Thomson in Tokyo

KAO, the Japanese household products and cosmetics maker, unveiled a 4.5 per cent increase in pre-tax profits to ¥19.9bn (\$153.3m) for the first half to end September.

It indicated, however, that the "clear signs" of slower domestic economic growth were likely to result in a modest increase in sales for the remainder of the year.

Sales for the first half rose 3.6 per cent to ¥288.5bn, but Japanese companies have generally become more pessimistic about second-half sales, having previously expected a sluggish economy to regain momentum.

Department store sales remain weak, although the downturn is not expected to be deep enough to affect severely the sales of daily use goods. Kao's sales of personal care products and cosmetics rose 3.7 per cent, after the introduction of two new shampoo lines, while sales of household laundry and other cleaning products increased by 3.3 per cent, and those of hygiene and other products were 2.7 per cent higher.

Chemical product sales rose 5.3 per cent, in spite of the softness in important customer areas, such as the auto industry, construction, and paper and pulp. Sales of fatty chemicals rose 9.7 per cent, and sales of specialty chemicals and floppy disks were 3.4 per cent higher.

For the full year, the company predicts sales of ¥585bn, up from ¥570bn last year, and a pre-tax profit of ¥42bn, up from ¥40bn.

### Fujisankei puts \$50m into new US film maker

Fujisankei Communications Group, a Tokyo media and entertainment company, said it has invested \$50m to form a US film production company, Reuters reports.

Although Japanese investment in Hollywood has become fairly commonplace, Fujisankei is the first Japanese company to form its own production company in the US. Other Japanese investment has been in existing Hollywood studios. Fujisankei California Entertainment intends to produce one to two films a year.

### Interest helps Engen rise 34% to R286m in difficult trading

By Philip Gawth in Johannesburg

ENGEN, the integrated energy company in South Africa's Censor group, overcame a difficult operating environment to record a 34 per cent increase in attributable earnings in the year to 31 August. The company was helped by interest income on the proceeds of a R1.1bn (\$365.5m) rights issue.

The benefits of the issue saw the group record finance income of R42m, compared with a finance charge of R29m last year. This contributed to a 34.3 per cent rise in attributable income, to R286m.

Earnings per share were diluted by the rights issue, rising 20 per cent to 283 cents. The dividend was also lifted by 20 per cent to 115 cents per share.

Turnover advanced by 20 per cent to R6.1bn, but margins were trimmed with the result that operating income was only 17.3 per cent up at R379m. Mr Rob Angel, managing director, said there had been no volume growth for their products in the past year and cost inflation rose faster than selling prices.

This offset the benefits of a rationalisation programme and of integrating the Trek product

distribution into the Mobil network. A feature of Engen's performance had been the exceptional increase in the group's exports, albeit off a low base, to contribute about 5 per cent of profits.

Mr Angel said Engen was trading with nine African countries and all the Indian Ocean islands, volumes having increased by about 250 per cent during the past nine months.

Significant progress has also been made with exploration and production. Engen is involved with two oil companies drilling in Gabon and Mr Angel said there was hardly a country on the west coast of Africa to whom they were not talking.

He said that Engen's acceptance as a regional participant had been a highlight of the past year, with several large companies looking to do business with them.

Phase 1 of the group's refinery expansion plan, to increase capacity by 30 per cent, is on target for completion by July 1992. While it will not help profits in the next 12 months, which Mr Angel says will be tough, he is predicting real earnings growth.

### Four mines in Rand Group lift profits 33%

By Philip Gawth

FOUR gold mines in the Rand Mines group lifted after-tax profits by 33 per cent to nearly R27m (\$8.6m) in the September quarter after benefiting from cost controls and better productivity.

Total gold production for the quarter rose 11 per cent to 11,515kg and average underground costs declined to R31.572 per kg gold mined from R32,000. The average gold price received was virtually unchanged at R38,811 per kg.

Profit sharing and productivity schemes were successfully implemented at the Harmony, ERPM and Durban Deep mines. The mines paid a total of R3.6m in the quarter in terms of the schemes which Mr John Turner, chairman of the gold division, described as "playing a key role in the performance of the mines concerned".

Last week the JCI group announced it had paid R5.2m in productivity bonuses during the quarter. The best performance came from Harmony, the group's largest mine, which lifted underground gold production by 19 per cent to 5,634kg. After-tax profit rose 52.5 per cent to R19.9m.

ERPM improved its operating performance to record a working profit of R5.4m, but a heavy interest payment of R13.3m left the mine with a loss of R5.7m for the quarter, against a R7.2m loss last year.

The mine had total borrowings and deferred interest of R25m at end-September.

Durban Deep lifted profits to R6.1m from R3.9m while Blyvooruitzicht was the only mine in the group to record lower profits, down by R3m to R7.6m because of an increased tax bill.

The Barbrook mine remains on care and maintenance and is not due to re-open in the foreseeable future.

### Fletcher to sell assets

FLETCHER CHALLENGE, New Zealand's largest industrial company, plans to continue selling of marginal assets in the year to June 1992, Reuters reports.

Mr Hugh Fletcher, Fletcher Challenge chief executive, said the company planned to sell about NZ\$750m (US\$424.5m) of assets in 1991-92, compared with NZ\$1bn the previous year.

"It's all about trying to improve the quality of our portfolio and concentrate on the products that we believe we can be an internationally excellent operator," Mr Fletcher said in a television interview.

While Fletcher Challenge sold its ammonia and urea business in Taranaki, New Zealand, for NZ\$45.5m earlier this month, it would concentrate on its methanol business.

Mr Fletcher said the company hoped to double its level of Australian shareholders, but this would not be through new equity issues.

About 10 per cent of the company's shareholders are Australian.

"We will achieve our balance sheet objectives without issuing any more ordinary equity," he said.

## TOTAL

### Listing on the New York Stock Exchange and Global Share Offering

Issue Price FF 903 per Share

This offering is made in connection with the application made by TOTAL to list its B shares represented by American Depositary Shares on the New York Stock Exchange with a view to widening its shareholder base and achieving greater liquidity in the market for its shares.

The 2,900,000 share global offering currently launched by TOTAL consists of:

- a public offering of 1,500,000 shares represented by ADSs in the United States, underwritten by a syndicate of banks led by LEHMAN BROTHERS;
- a concurrent public offering of 800,000 shares in France underwritten by a syndicate of banks led by BANQUE PARIBAS;
- a concurrent offering of 600,000 shares outside France and the United States underwritten by a syndicate of banks led by CREDIT SUISSE FIRST BOSTON Limited.

An over-allotment option of 200,000 new shares has also been granted to the United States underwriters, which, if exercised in full, will bring the total size of the global offering to a maximum of 3.1 million shares, representing a dilution of 6.4% of TOTAL's fully diluted capital.

In order to permit a simultaneous placement of the three tranches, there is no preemptive rights and no priority subscription period for existing shareholders. Proceeds raised from the global offering will be used by TOTAL for general corporate purposes.

LEHMAN BROTHERS INTERNATIONAL and PARIBAS CAPITAL MARKETS GROUP are joint global coordinators of the global share offering.

#### ISSUE PRICE

The issue Price of FF 903 was determined by TOTAL's Board of Directors on October 21, 1991 in compliance with French law, which requires that the issue Price be not less than the average of the opening trading prices of the currently outstanding shares on the Paris Bourse for a period of 20 consecutive business days during the 40 business day period immediately preceding the date of commencement of the offering. Holders of the shares offered will be entitled to receive payment in full of any dividends declared in respect of 1991 and subsequent years.

#### TIMING OF THE OFFERING

A subscription period for the French and the International offerings commenced on October 22 and will end on October 24, 1991. The offering in the United States will commence on October 24.

#### LISTING AND TRADING

Applications have been made to list the shares offered in the global share offering on the Paris Bourse and to have such shares listed on the London Stock Exchange and authorized for quotation on SEAQ International. The ADSs offered in the United States have been approved for listing on the New York Stock Exchange.

It is expected that trading in the new shares on the Paris Bourse, quotation of such shares on SEAQ International, and trading of the ADSs on the New York Stock Exchange will commence simultaneously on October 25, 1991 at 2:30 p.m. Paris time (equivalent to 2:30 p.m. London time and 9:30 a.m. New York time).

Until the closing of the offering, which is expected to occur on October 31, 1991, such trading shall be by way of "promesses d'actions" (the equivalent of "when-issued" trading) on the Paris Bourse and such quotation shall be on a "when-issued" basis on SEAQ International.

This advertisement is issued by TOTAL and its content has been approved for the purposes of section 57 of the Financial Services Act 1986 by Lehman Brothers International and Paribas Capital Markets Group, joint global coordinators of the contemplated offering as well as Credit Suisse First Boston Limited, lead-manager of the International Tranche, who are respectively members of The Securities and Futures Authority Limited.

This advertisement does not form part of any offer of securities. Any application for shares should be made on the basis of information contained in the prospectus alone. Before deciding to apply for shares, you should consider whether the shares are a suitable investment for you. The value of shares can go down as well as up. If you need advice you should consult an appropriate professional advisor.

This advertisement represents a summary only of the details of the offering outlined in the prospectus.



### Residential Property Securities No.1 PLC

£200,000,000

Mortgage Backed Floating Rate Notes 2018

Notice of Partial Redemption

S.G. Warburg & Co. Ltd. announce that Notes for the nominal amount of £2,400,000 have been drawn for redemption on 22nd November, 1991, in accordance with Clause 5(b) of the Terms and Conditions of the Notes.

The distinctive numbers of the Notes drawn, are as follows:-

26 82 140 196 253 310 367 423 480 537  
593 651 877 934 991 1048 1105 1162 1218 1275  
1800 1856 1913 1969

On 22nd November, 1991 there will become due and payable upon presentation of each Note drawn for redemption, the principal amount thereof, together with accrued interest to said date, at the office of:-

S.G. Warburg & Co. Ltd.

2 Finsbury Avenue, London EC2M 2FA

or one of the other paying agents named on the Notes.

Interest will cease to accrue on the Notes called for redemption on and after 22nd November, 1991 and Notes so presented for payment should have attached all Coupons maturing after that date.

£133,300,000 nominal amount of Notes will remain outstanding after 22nd November, 1991.

22nd October, 1991

US\$100,000,000

MARINE MIDLAND BANKS, INC.

FLOATING RATE SUBORDINATED CAPITAL NOTES

due 1999



For the three months 22nd October 1991 to 22nd January 1992, the Note will carry an interest rate of 5% per cent per annum with a Coupon amount of US\$146.94 per US\$10,000. Interest payment date 22nd January 1992.

HONGKONG BANK LTD LONDON LIMITED

INTEREST DETERMINATION AGENT



## INTERNATIONAL COMPANIES AND FINANCE

## Swiss Bank lifts profit by 40% in sluggish economy

By William Ouliforce in Geneva

SWISS BANK Corporation, Switzerland's second largest bank, said yesterday it had lifted its profit for the first nine months of 1990 by nearly 40 per cent, before provisions and provisions, but it gave no figures.

At the half-way stage SBC disclosed a 25 per cent increase to SF580m (\$62m) in the comparable earnings figure.

Group and parent bank cash flows for the full year should be well ahead of last year's results, SBC said. But it was already clear that provisioning needs would also be significantly higher than in 1990. With the economy continuing to be sluggish, loan positions suggest an increased risk had to be taken.

Last year group cash flow

fell by 18 per cent to SF1.65bn while the parent bank's cash flow at SF1.43bn was down by 0.9 per cent. The first nine months of 1990 were, however, badly affected by the outbreak of the Gulf crisis.

Net interest earnings for the first nine months this year had been 9.5 per cent higher thanks to improved margins, especially outside Switzerland, and operations, SBC reported.

On a cumulative basis commission income had grown by 6.7 per cent compared with the first three quarters of 1990. Improved revenues from portfolio management and from credit and fiduciary businesses had outweighed the drop in brokerage receipts by a wide margin.

Foreign exchange earnings had also shown a particularly encouraging advance.

Total assets expanded by 1.7 per cent to SF172.5bn during the first nine months, although the depreciation of the dollar since the end of June had resulted in third-quarter growth of only 0.5 per cent.

On aggregate, SBC's customer deposits declined by 3.9 per cent during the third quarter. Interbank time deposits, which had been relatively low at the end of June, were up 12.8 per cent; non-bank time deposits fell by 6.1 per cent. With short-term interest rates staying high, there was a net outflow of 0.1 per cent from savings and deposit accounts.

Volkbank results, Page 28

## NCC gives warning after drop of 44%

NCC, the Swedish property and construction group, yesterday reported a 44 per cent fall in profits for the first eight months to SKr242m (\$39.2m) from SKr432m, reflecting the current stagnation in the European building industry, writes Robert Taylor.

The company said results for 1991 were expected to be worse than last year when it made a SKr682m profit.

Sales fell to SKr14.58bn from SKr15.50bn a year earlier. NCC's international building division was particularly badly affected with a loss of SKr115m compared with one of SKr61m in the same period of 1990.

The troubles of Sweden's own construction market are visible in the company's results from its NCC Bygg division which suffered a 28 per cent drop in orders to SKr9.90bn compared with SKr13.68bn for the first eight months of last year. Profits from the division fell to SKr508m from SKr558m.

NCC's property interests also suffered with a sharp drop in profits to only SKr2m compared with SKr71m a year earlier.

The group said yesterday that redirecting its priorities to investments in foreign markets would continue and that planned property sales in Sweden would be postponed for the time being. It said that financial results on the property side would probably continue to worsen compared with last year.

The group's stainless steel manufacturer Avesta also reported a deficit of SKr17m compared with a SKr29m profit for the same period of 1990 but the loss suffered by NK, the department store, was SKr3m compared with SKr67m for the first eight months of last year. Passenger line Bifon dropped to SKr29m.

## Mannesmann deal raises a groan

Christopher Parkes on the German group's acquisitions strategy

The investment community groaned in 1987 when Mannesmann, the German engineering group, bought Europe's largest clutch maker, Fichtel & Sachs. It groaned again yesterday when it announced an agreement to buy control of vehicle instruments and controls specialist VDO Adolf Schindling.

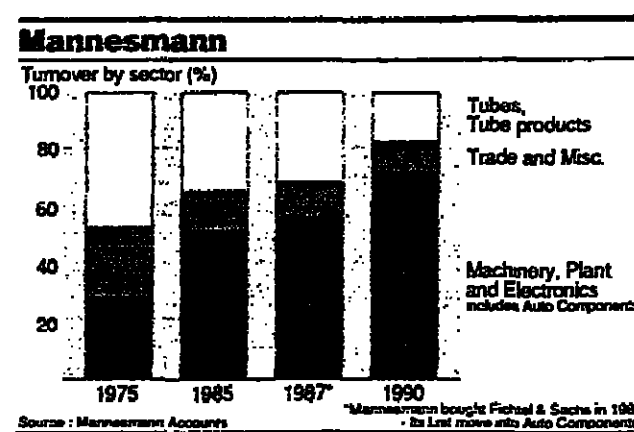
The complaints were the same on both occasions: Mannesmann had paid too much, and if it really wanted to escape the cyclical clutches of its basic steel tube business, what on earth was it doing shovelling funds into the cynical and crushingly competitive motor components business?

"It's a pity they can't find anything better to do with their money," one analyst remarked. "They should have kept it in the bank."

Mannesmann has not disclosed the price of the acquisitions. But Siemens, which also bid, hinted yesterday when it said it regretted not having succeeded, adding that the controlling Schindling-Rheinberger family wanted too much.

Even so, Mannesmann's money is still pouring into components. Last year while Fichtel & Sachs's orders and sales fell, it spent DM277m (\$164m) building up the division - 22 per cent of the group's total capital investment - compared with DM241m in 1989.

Mr Werner Dieter, chairman, had once nurtured other ambitions and spending priorities. He announced two years ago that he was looking for a big buy in the US, a market which



in 1990 accounted for only DM2.2bn of total group sales of DM24bn. Earlier this year he said it was a pity he had ever mentioned the idea: negotiations on several prospective deals had failed.

The main thrust of Mr Dieter's strategy, however wrong and costly it is considered to be outside the Düsseldorf headquarters, continues at speed. Mannesmann is becoming a technology-led company, characterised by the clear shift from the old steel and tube base, which in 1975 accounted for almost 50 per cent of sales.

By 1990, the proportion was down to just 17 per cent, while plant and machinery, formerly 29 per cent of the business, grew to 47 per cent. Last year, before the acquisition of a controlling stake in Boge, with sales of DM750m, vehicle components were 13 per cent of turnover sharpening competition alone, will give Mannesmann annual motor industry

midway sales of DM1.1bn.

The development of Mannesmann's electronics interests, after a wobbly patch which concluded with the sale last year of the company's stake in Kienzle, the computer group, to Digital Equipment of the US underlines the strategic changes.

Growth here has been generally organic. Hopes are especially high for Mannesmann's planned D2 mobile telephone network, due to be introduced shortly, now that the obstructive Telekom state monopoly has been told to reduce the rates it wanted to charge for leasing lines to the newcomer.

The deal with the Schindling-Rheinberger family, which surrendered control after commissioning a study which showed it had "no chance" of beating sharpening competition alone, will give Mannesmann annual motor industry

sales of at least DM6bn.

While not on the same scale as the likes of Robert Bosch, which has a components business worth DM18bn a year, it has, in four years, built from scratch a new business offering a virtually full product range, encompassing wheels, clutches, suspension gear, brakes, axles, instruments and body mouldings, and employing more than 40,000 people.

Disgruntled analysts suspect more acquisitions will fill out the range, and although Mannesmann said yesterday the VDO factories and workforces would be kept intact, the size and scope of the group's components business suggests the time for consolidation and restructuring cannot be far away. Group profits fell 27 per cent in the first half of this year while motor parts sales and orders dropped 1 per cent and 2 per cent respectively.

Mr Marcus Bierich, chief executive of Robert Bosch, said during the summer that profits from his automotive components divisions "fell drastically" in the first six months of this year. Motor industry pressure for price cuts was growing, he said, under short-term pressure from falling sales, and under a longer-term squeeze from Japanese car makers pushing deeper into Europe.

With such weighty matters before him, Mr Dieter may see no real future in his technology-led combine for the bicycle business which came with Fichtel & Sachs, nor for the swanky Jaeger-LeCoultre Swiss watch brand which is part of the VDO package.

## Dassault plunges to FFr194m

By William Dawkins in Paris

DASSAULT Aviation, the French maker of military and business aircraft, reported a 26 per cent decline in group profit for the first half of the year, as on target in new orders.

The group, headed by Mr Serge Dassault, saw a 25 per cent decline in consolidated sales from FFr6.8bn (\$1.53bn) in the first half of 1990 to FFr5.2bn in the same period of this year. Consolidated profits fell 11.8 per cent from FFr33m to FFr29m.

Group profits, after minorities, fell more steeply from FFr28m to FFr19m. Exports

accounted for 60 per cent of sales.

New orders taken in the first half - of which 36 per cent came from civil and space industry customers - dropped to FFr3bn from FFr6.5bn in the same period in 1990. However, the figure was not indicative of the likely volume of orders for the full year, said the group. It expected full-year turnover to reach FFr15bn, which would be well down on the FFr18.8bn reported last year.

Development of the Rafale, the new fighter aircraft due for

delivery to the French military in 1996, was proceeding on target. Three prototypes were currently undergoing trials, said Mr Dassault.

The Falcon 50 and 300 business jets were showing good sales, after a slowdown at the start of the year due to the impact of the Gulf crisis.

Meanwhile, development of the new Falcon 2000 medium-sized business jet - due for service from 1994 - was on schedule. A prototype was under construction with co-operation from Alenia, the Italian aerospace group.

## Granada names chief executive

By Jane Fuller in London

MR GERRY Robinson, who led Compass Group through what was briefly the UK's largest management buy-out, has been appointed chief executive of Granada Group, the British television, leisure and computer services concern.

Last week Granada retained its UK television franchise for £3m, in spite of being spectacularly outbid by North West Television, which fell at the quality hurdle.

On the same day, it cut 550

jobs as part of a radical reorganisation of its loss-making computer maintenance business. The poor performance was a main reason for the departure of the previous chief executive, Mr Derek Lewis.

His resignation in May was seen as a sacrifice required to clear the way for a rights issue, which came in July. It brought in £163m (\$262m). The proceeds, together with the £147m sale of bingo clubs, cut group debt from £534m to £340m.

Granada, which cut its interim dividend, had earnings per share last year not much above the 1986 figure.

Mr Robinson said his job would be to "look at the basics in terms of improving profitability". He said his experience at Compass would help him in dealing with Granada's motor-vehicle services, computer maintenance and TV rental operations.

Lex, Page 22  
Observer, Page 20

## Beghin-Say down

BEGHIN-SAY, the French food company controlled by Italy's Ferruzzi group, reported net profit after payments to minority interests down 38 per cent in the first half of 1991 to FFr464m (US\$60.6m).

## Investor frustration holds secret of trust's success

THE SECRET of the success of M&G's new Income Investment Trust may lie in the frustration of private investors over the government's insistence on individual share ownership, writes Norma Cohen in London.

The Trust, which raised a record £246m after a well orchestrated - and well financed - publicity campaign, saw the bulk of demand from those who wished to put the securities in their tax-efficient Personal Equity Plans.

In her desire to see individual own shares in individual

companies, Mrs Thatcher's government designed PEPs in 1987 and set a limit on the percentage of funds that could be invested in collective investment schemes.

Currently, up to £5,000 per year can be put into a PEP, with all investments free from capital gains or income tax. However, no more than £3,000 can be put into a collective investment and at least half must be invested in the UK.

Thus, those individuals chary of their ability to pick stocks wisely, or who are concerned about achieving sufficient diversification, have been

unable to take full advantage of a PEP's tax relief.

Mr David Boutell, of Chase de Vere, an independent financial adviser and producer of the monthly PEP Guide, said that most individuals find that managing a portfolio of eight to 10 stocks is awkward and expensive, but that fewer stocks expose the investor to greater risks. Thus, collective schemes make more sense.

"We thought the M&G trust was a good idea and recommended it heavily to our clients," he said.

Despite intensive lobbying from the operators of collective

investment schemes, the government has held firm in its insistence that no more than half a PEP can be invested that way.

M&G's new fund allowed individuals to take advantage of a loophole in the current PEP legislation enabling them to put all their funds into a new equity offering. During the 42-day initial offering period of the Income Investment Trust, its shares are eligible.

However, once the offer closes, it will no longer be a suitable PEP investment beyond the £3,000 limit.



## Proposed Privatisation of Heracles General Cement Company S.A.

As part of the Greek Government's privatisation programme, Industrial Reconstruction Organisation S.A. ("IRO"), a holding company controlled by the Greek state, is proposing to offer for sale a block of shares representing approximately 69.8% of the issued share capital (the "IRO Shareholding") of Heracles General Cement Company S.A. ("Heracles"). IRO has appointed Morgan Stanley International and National Investment Bank for Industrial Development S.A. as its joint financial advisors for this transaction.

Heracles is the largest producer and exporter of cement in Greece. Its shares have been listed on the Athens Stock Exchange since 1919.

Persons interested in participating in the offering programme who believe that they have the necessary financial and business capacity to consummate an acquisition of the IRO Shareholding expeditiously and to contribute to the development of the Heracles Group, are invited to express their interest in writing directly to Morgan Stanley International and National Investment Bank for Industrial Development at the following address by no later than 5 p.m. (London time) on 31 October, 1991.

Morgan Stanley International  
Kingsley House  
1A Wimpole Street  
London W1M 7AA  
England

For attention of:  
Heracles Privatisation Team  
Mergers & Acquisitions Department  
Telephone: (44 71) 709 3900  
Telefax: (44 71) 709 3912

Those parties who are invited to participate in the offering programme will be required to sign a Confidentiality Agreement before they are provided with information regarding Heracles, the IRO Shareholding and the offering procedures.

IRO reserves the right in its sole discretion to conduct such enquiries as it or its advisors may consider appropriate regarding the ability of any party to consummate the proposed transaction and to disallow any party from participating in the offering programme.

This advertisement has been approved by Morgan Stanley International, a member of the Securities and Futures Authority, for distribution in the United Kingdom. This advertisement does not constitute an offer for sale.

22 October, 1991

October 1991

This announcement appears as a matter of record only.

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Banca Popolare di Milano, (London Branch)

Banco Ambrosiano Veneto

Banco di Roma, (Frankfurt Branch)

Bankhaus Gebrüder Bethmann

Bayerische Vereinsbank AG

Berliner Bank Aktiengesellschaft

BfG Bank AG, Frankfurt

BRED Paris

Commonwealth Bank of Australia

Iran Overseas Investment Bank Limited

Österreichische Länderbank AG, Vienna

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## FT GUIDE TO WORLD CURRENCIES

The table below gives the latest available rates of exchange (rounded) against four key currencies on Monday, October 21, 1991. In some cases the rate is nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are tied.

COUNTRY	£ STG	US \$	D-MARK	YEN (x 100)	COUNTRY	£ STG	US \$	D-MARK	YEN (x 100)
Afghanistan (Afghani)	99.25	57.737	34.1652	44.1601	Ghana (Cedi)	649.782	378	223.677	289.113
Albania (Lek)	10.1370	5.897	3.4895	4.5103	Gibraltar (Gib D)	0.5817	0.3442	0.4445	0.5817
Algeria (Dinar)	30.7734	17.3469	17.2516		Greece (Drachma)	322.200	188.031	111.265	143.815
Andorra (Escudo)	163.25	106.563	63.0808	81.535	Greenland (Danish Krone)	11.2250	6.5299	3.804	4.9944
Angola (Kwanza)	177.80	103.432	61.2048	79.1101	Guatemala (Quetzal)	4.6660	2.7085	1.6027	2.1035
Antigua (Antigua Dollar)	1.7007	1.0527	0.6582	0.8516	Hong Kong (Hong Kong Dollar)	7.7536	4.8527	2.9363	3.9145
Aruba (Aruban Florin)	3.0870	1.7958	1.0926	1.4326	India (Rupee)	16.6376	10.1235	6.2500	8.2500
Australia (Australian Dollar)	2.1600	1.2545	0.7835	1.0206	Indonesia (Rupiah)	1,662.50	1,000.00	625.00	800.00
Austria (Schilling)	20.355	11.8433	7.2026	9.0745	Iran (Iranian Rial)	2,700.00	1,666.67	1,000.00	1,266.67
Azores (Portuguese Escudo)	200.00	145.433	86.0955	111.235	Israel (Israeli Sheqel)	1.8000	1.1000	0.6800	0.8800
Bahamas (Bahamian Dollar)	1.7100	1.0527	0.6582	0.8516	Italy (Lira)	2,036.00	1,266.67	783.33	1,000.00
Bahrain (Bahraini Dinar)	4.7600	2.7085	1.6027	2.1035	Jamaica (Jamaican Dollar)	27.55	16.6376	10.1235	12.6667
Barbados (Barbadian Dollar)	1.7000	1.0527	0.6582	0.8516	Japan (Yen)	100.00	0.6076	0.3756	0.4800
Belgium (Belgian Franc)	36.3636	21.3636	12.9636	16.6667	Jordan (Jordanian Dinar)	1.7000	1.0527	0.6582	0.8516
Belize (Belize Dollar)	1.7000	1.0527	0.6582	0.8516	Kazakhstan (Tenge)	100.00	0.6076	0.3756	0.4800
Bermuda (Bermudian Dollar)	1.7000	1.0527	0.6582	0.8516	Kenya (Kenyan Shilling)	49.4500	28.992	17.995	23.081
Bhutan (Bhutanese Ngultrum)	44.41	25.8347	15.9274	20.577	Korea (South Korean Won)	100.00	0.6076	0.3756	0.4800
Bolivia (Boliviano)	6.3000	3.804	2.375	3.040	Kuwait (Kuwaiti Dinar)	4.4500	2.6700	1.6667	2.1667
Bosnia (Bosnian Mark)	1.7000	1.0527	0.6582	0.8516	Laos (Lao Kip)	100.00	0.6076	0.3756	0.4800
Brazil (Brazilian Real)	100.00	54.0064	33.1532	42.4372	Lebanon (Lebanese Pound)	150.00	90.4638	56.5383	72.9167
Bulgaria (Bulgarian Lev)	2.4000	1.4400	0.8800	1.1360	Libya (Libyan Dinar)	4.0000	2.4000	1.5000	1.9333
Burkina Faso (Burkina Faso Franc)	1.7000	1.0527	0.6582	0.8516	Liechtenstein (Swiss Franc)	1.0000	0.6076	0.3756	0.4800
Burundi (Burundian Franc)	347.50	203.316	120.31	155.506	Lithuania (Lithuanian Litas)	200.00	121.360	75.936	97.632
Cameroon (Cameroonian Franc)	137.90	80.56	47.4005	61.3388	Madagascar (Malagasy Ariary)	200.00	121.360	75.936	97.632
Canada (Canadian Dollar)	1.3595	0.8200	0.5125	0.6600	Malawi (Malawi Kwacha)	100.00	0.6076	0.3756	0.4800
Cape Verde (Cape Verde Escudo)	143.52	86.592	54.1155	70.0189	Malaysia (Malaysian Ringgit)	2.0000	1.2136	0.7594	0.9763
Cayman Islands (Cayman Dollar)	1.7000	1.0527	0.6582	0.8516	Mali (Mali Franc)	100.00	0.6076	0.3756	0.4800
Chad (Chad Franc)	1.7000	1.0527	0.6582	0.8516	Mexico (Mexican Peso)	50.00	30.4638	19.0399	24.375
Chile (Chilean Peso)	600.00	360.00	216.00	276.00	Moldova (Moldovan Leu)	100.00	0.6076	0.3756	0.4800
China (Renminbi Yuan)	8.2750	5.1562	3.2226	4.1500	Monaco (Monaco Franc)	100.00	0.6076	0.3756	0.4800
Colombia (Colombian Peso)	1,100.00	670.00	402.00	517.00	Morocco (Moroccan Dirham)	100.00	0.6076	0.3756	0.4800
Costa Rica (Costa Rican Colon)	100.00	60.00	36.00	45.00	Mozambique (Mozambique Escudo)	100.00	0.6076	0.3756	0.4800
Cote d'Ivoire (Cote d'Ivoire Franc)	1.7000	1.0527	0.6582	0.8516	Nepal (Nepalese Rupee)	100.00	0.6076	0.3756	0.4800
Cuba (Cuban Peso)	1.7000	1.0527	0.6582	0.8516	Netherlands (Guilder)	100.00	0.6076	0.3756	0.4800
Cyprus (Cypriot Pound)	1.7000	1.0527	0.6582	0.8516	New Zealand (New Zealand Dollar)	1.0000	0.6076	0.3756	0.4800
Czech Republic (Czech Koruna)	51.44	29.9243	17.7074	22.8874	Nigeria (Nigerian Naira)	100.00	0.6076	0.3756	0.4800
Denmark (Danish Krone)	136.76	84.5938	52.8700	67.8561	Romania (Romanian Leu)	100.00	0.6076	0.3756	0.4800
Dominican Republic (Dominican Peso)	1.7000	1.0527	0.6582	0.8516	Russia (Russian Ruble)	100.00	0.6076	0.3756	0.4800
Dominica (Dominican Dollar)	1.7000	1.0527	0.6582	0.8516	Saudi Arabia (Saudi Riyal)	100.00	0.6076	0.3756	0.4800
Dominican Republic (Dominican Peso)	1.7000	1.0527	0.6582	0.8516	Senegal (Senegalese Franc)	100.00	0.6076	0.3756	0.4800
Ecuador (Ecuadorian Dollar)	1.7000	1.0527	0.6582	0.8516	Sierra Leone (Sierra Leone Leone)	100.00	0.6076	0.3756	0.4800
Egypt (Egyptian Pound)	1.7000	1.0527	0.6582	0.8516	Singapore (Singapore Dollar)	1.0000	0.6076	0.3756	0.4800
El Salvador (El Salvador Colon)	1.7000	1.0527	0.6582	0.8516	Slovakia (Slovak Koruna)	100.00	0.6076	0.3756	0.4800
Ethiopia (Ethiopian Birr)	3.5412	2.16	1.33	1.70	Slovenia (Slovenian Tolar)	100.00	0.6076	0.3756	0.4800
Falkland Islands (Falkland Pound)	1.7000	1.0527	0.6582	0.8516	Spain (Spanish Peseta)	166.64	100.00	62.50	80.00
Fiji (Fiji Dollar)	1.7000	1.0527	0.6582	0.8516	Switzerland (Swiss Franc)	1.0000	0.6076	0.3756	0.4800
Finland (Finnish Markka)	5.9457	3.6531	2.2830	2.9375	Taiwan (New Taiwan Dollar)	100.00	0.6076	0.3756	0.4800
France (French Franc)	6.5596	4.0360	2.5225	3.2226	Thailand (Thai Baht)	100.00	0.6076	0.3756	0.4800
French Polynesia (CFP Franc)	1.7000	1.0527	0.6582	0.8516	Tanzania (Tanzanian Shilling)	100.00	0.6076	0.3756	0.4800
Gabon (Gabon Franc)	1.7000	1.0527	0.6582	0.8516	Togo (Togolese CFA Franc)	1.7000	1.0527	0.6582	0.8516
Gambia (Gambian Dalasi)	1.7000	1.0527	0.6582	0.8516	Tonga (Tongan Pa'anga)	1.0000	0.6076	0.3756	0.4800
Germany (D-Mark)	1.0000	0.6076	0.3756	0.4800	Trinidad and Tobago (Trinidad Dollar)	1.0000	0.6076	0.3756	0.4800

Special Drawing Rights October 19, 1991. United Kingdom £0.792227 United States \$1.06377 Germany D-Mark 1/3 Japan Yen 1/100.  
European Central Bank October 21, 1991. United Kingdom £0.792227 United States \$1.06377 Germany D-Mark 1/3 Japan Yen 1/100.

Abbreviations: (a) Free rate; (b) Banknote rate; (c) Commercial rate; (d) Controlled rate; (e) Export rate; (f) Import rate; (g) Non-commercial rate; (h) Business rate; (i) Buying rate; (j) Selling rate; (k) Forward rate; (l) Market rate; (m) Official rate; (n) Official rate; (o) Convertible rate; (p) Parallel rate; (q) Some data supplied by Bank of America, Economic Division, London, England. Sources: 071 634 4360/5.

(1) Due to incorrect data the Cuban Peso has been in error since Sept. 2.

Monday, October 22, 1991

## INTERNATIONAL CAPITAL MARKETS

## Treasuries slide on fears of shift in economic policy

By Patrick Harverson in New York and Sara Webb in London

## BENCHMARK GOVERNMENT BONDS

Yield: Local market standard  
Prices: US, UK in dollars, others in local currency

Technical Data/ATLAS Price Source

US Treasury

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## UK COMPANY NEWS

## Second legal action taken in US to repel generic drug makers Glaxo faces new attack on patents

By Paul Abrahams and Bernard Simon

GLAXO, Britain's biggest pharmaceutical company, yesterday fired a second salvo in the defence of its patents for Zantac, the ulcer treatment which is the world's best selling drug.

The company has started legal action in the US against Novopharm, one of Canada's largest generic drug manufacturers. This follows Glaxo's decision last April to fight Cenapharm, a much smaller Canadian manufacturer, which like Novopharm has also filed an abbreviated new drug application to produce a generic version of Zantac. In both cases, Glaxo claims the companies will infringe one of the two patents protecting Zantac.

The implications for Glaxo if it loses the patent battle are potentially serious. Generic drugs have in the past taken as much as 50 per cent of the market of a previously patented drug within two years.

With sales of £1.6bn a year, Zantac represented 47 per cent of Glaxo's sales in the year to June 1991, and probably more of its profits. About half of Zantac's sales are in the US. Glaxo's dependency on Zantac is, however, declining as other products come on stream. Its share price fell 15p to £14.23.

Glaxo said it believed it had valid patent property in the US extending at least until 2002. It said it had not been surprised by additional generic drug manufacturers attacking its

patent and would not be surprised if other companies followed Novopharm's lead. Analysts are divided over the strength of the Form 2 patent. Ms Lisa Arnold, an analyst at County NatWest, argued that Zantac is safe until the end of the century. However, Mr Robin Gilbert, a pharmaceutical analyst at James Capel, said few people in the industry believe Glaxo stands a chance when it tries to defend the patent.

The question is not whether Glaxo has an excellent future, said Mr Gilbert. "The company has plenty of good products in the pipeline. The question is whether Glaxo's future is spectacular."

## Amber Day beats recession with £10.1m

WITH EVERYONE wanting a bargain in the recession-hit UK, the Amber Day retail group more than trebled its profit last year thanks to its What Everyone Wants discount chain, writes Jane Fuller.

The taxable figure rose from £3.02m to £10.1m in the 53 weeks to August 3, on turnover of £103.2m (£31.2m). It had been predicted with the £24.4m rights issue in June - the second cash call in little more than a year - that profit would reach £9.75m.

What Everyone Wants was the driving force behind the growth. Its 44 shops in Scotland and the north of England contributed £13.1m operating profit.

The menswear chain, Woodhouse and Review, lost money as it succumbed to the sector's weakness in the south of

England. The combined operating loss of £204,000 compared with a profit of £137m.

Mr Philip Green, chairman and chief executive, was candid about the focusing of effort on WEW, rather than on the menswear stores acquired in 1988-89, his first year as head of the group.

WEW's operating profit margin was 16 per cent on turnover of £31m. He said margins had been enhanced by the computerised gathering of sales information, the tight control of stock and the low cost base of its sites. The discount chain's products include clothes, household goods, toys and perfume.

With the rights issue proceeds coming in just before the year-end, net debt was cut from £23m in July 1990 to virtually nothing. The issue restored the group to

net worth of £22m.

Mr Green anticipated that the debt position would be similar at the end of this year, after the opening of a dozen new WEW stores and some refurbishment, giving a total capital spending budget of £3m to £4m (£3.2m). He stressed that no further acquisitions or share issues were planned.

The average number of shares went up from 51.6m to 91.7m last year. As a result, earnings per share grew less rapidly than profits to 7.05p (£4.29p). The June 1-for-3 issue will have a further impact on share numbers this year.

Import and distribution increased its profit to £1.12m (£447,000). Interest costs rose to £3.55m (£150,000 received). A final dividend of 1.5p makes a total of 2.7p (2p).

## Advertising fall leaves Southern News at £8.6m

SOUTHERN Newspapers, the regional publisher which received a number of bid approaches, yesterday revealed that pre-tax profits slumped from £15.05m to £8.61m over the year to end-June as the recession in the south of England hit advertising revenues, writes Clare Pearson.

Profits from newspaper printing and publishing dropped to just £3.1m (£7.91m) as turnover fell from £77.1m to £71.4m.

A surplus on disposal of investments, including shares in Reuters, the news agency and information group, and Associated British Ports, accounted for £5.9m (£5.5m) of

profits. However, Mr John Salkeld, who joined the board in March and this month became chairman, indicated in his annual statement that the outlook for the current year was brighter. Revenues appeared to have stabilised, he said.

He added that the company had the "management and financial strength to continue trading successfully as an independent group." The final dividend is maintained at 7.5p for an unchanged yearly total of 10.5p.

Mr Salkeld said yesterday that the group's financial position was strong; its bank overdraft, net of cash, amounted to

only £578,000, and it was less than 15 per cent geared. The Monopolies and Mergers Commission is due to report by Thursday on the bid approaches - which include those from Pearson, which publishes the Financial Times, and Reed International, the publishing group - to Mr Peter Lilley, the trade and industry secretary.

### COMMENT

On the basis of the last quotes for shares in Southern, which change hands under the Stock Exchange's matched bargain rules, the group is capitalised at about £70m and the stock is trading on a multiple of about

30 times last year's earnings from newspaper publishing and printing. Evidently, the valuation owes a great deal to the expectation of bids emerging. The referrals of the five in July were made on the basis of the concentration of paid-for circulation to which the mergers would give rise, but the City is not expecting the MMC to block them. Any defence may be expected to make much of Southern's recent board appointments and a group reorganisation being carried out. The shareholder list includes M & G Investment Management and Portsmouth and Sunderland Newspapers, with about 5 per cent apiece.

## P&P shares plunge after profits warning

By Alan Cane

SHARES IN P&P, one of the UK's largest distributors of personal computers, halved in value yesterday after the company warned it was unlikely to make a profit in the second half of the year. As a consequence its full year figures would be well below market expectations.

The City reacted with surprise to the announcement and knocked the shares down from 101p to 50 1/2p.

The market had been predicting pre-tax profits of £6m-£8m for the full year, after the company made £3.3m on sales of £120m in the first half. Now it seems unlikely that P&P, chaired by Sir Roland Smith, former head of British Aerospace, could turn in profitable

six months figures before the second half of 1992. Traditionally, the second half is P&P's strongest sales period. This year sales did not materialise as customers struggling with the recession froze expenditure on personal computers and other capital items.

Analysts said they would have appreciated earlier warning of the problem. Their sense of shock was deepened by the fact that the company had appeared to perform well in the first half, despite chaotic conditions in the PC market. Margins were being cut to the bone through a combination of fierce price competition and the falling cost of computer hardware which had devastated some PC distributors.

P&P had been restructuring with the intention of improving the quality of earnings through a greater emphasis on computer services, which command substantially greater gross margins than PC sales. The restructuring measures had been brought forward by 12 months but yesterday's warning indicated that P&P is still very dependant on volume sales of PCs. The company announced a further 60 redundancies.

It claimed the balance sheet was still strong and that it would receive a dividend unchanged final dividend.

That would do little to comfort Scottish Amicable Investment Managers, which bought 5m P&P shares just before the price crashed.

## Institutions threaten to take joint action against Hanson

By Roland Rudd

HANSON's institutional investors are threatening to come together to put pressure on the conglomerate to change its managerial style.

The big investors were yesterday responding to a letter sent to them from Mr Peter Harper, Hanson's director in charge of investor relations.

The letter stressed Hanson's 27 years of uninterrupted growth and increase in earnings per share, and concluded that the conglomerate's strategy would remain to increase shareholders' value.

It was criticised by fund managers as "arrogant", "misguided" and "unsatisfactory". One said "it completely failed to address the issues raised. Lord Hanson must take note of what we are saying or we will be forced to get together to increase our influence."

Although it is unlikely to

involve all the big shareholders, the threat to meet in union is without precedent with Hanson.

Institutional investors want Lord Hanson to take account of criticisms over the company's corporate governance and want it to change its managerial style.

In particular, they want more independent non-executives appointed to the board, an explanation of the role of Lord White - head of Hanson Industries in the US but not a main board member - and some idea of who might succeed the two 69 year old Lords.

The biggest shareholders include Prudential Portfolio Managers, Norwich Union Life Insurance Society, Standard Life Assurance, Postal Investment Management, Legal & General Investment Management and Scottish Widows Fund Management.

Meanwhile, Hanson's offer document for Beazer - which gives a detailed breakdown of earnings in order to comply with US securities laws - shows that, for the first time in 27 years, UK profits have fallen in the first nine months of the company's trading year.

Pre-tax profit in the UK to the end of June fell from £443m to £368m, while in the US pre-tax profit rose from £311m to £432m.

The offer document also makes clear that the sale of Newmont Mining Corporation in December 1990 realised a profit of £170m which was taken above the line.

If it was taken below the line Hanson would not have been able to increase its overall pre-tax profits which went up from £393m to £567m for the nine months to end-June.

Hanson's shares yesterday fell by 3 1/2p to 217p.

## GrandMet acquires ouzo distiller

By Kerin Hope in Athens

GRAND METROPOLITAN, the UK food, drinks and retailing group, has bought Kaloyannis Brothers, Greece's leading ouzo producer, consolidating its presence in the Greek drinks market.

GrandMet acquired a 30 per cent stake in the distillery in 1989, together with distribution rights abroad, as part of its takeover of Metaxa, the family-owned Greek brandy maker.

The group paid Dr7.4bn (£23.7m) for the remaining 70

per cent of Kaloyannis, owned by Mr Spyros Metaxas.

Kaloyannis makes Ouzo 12, the most popular aniseed-flavoured aperitif in Greece, with a 40 per cent share of the market.

The company reported losses of Dr88,000 on turnover of Dr2.95bn in 1990. However, sales abroad have improved since GrandMet took over distribution of Ouzo 12.

Exports to Germany, the main foreign market for Greek

wines and spirits, doubled last year to 200,000 cases. Ouzo 12 is also the top-selling ouzo brand in international duty free shops, Metaxas said.

Overall consumption of ouzo in Greece is declining, driving small distillers out of business.

Marketing of well-known brand names is becoming increasingly aggressive as larger producers compete to keep their market share, especially in the main tourist resorts.

### NEWS DIGEST

## Bourne End £796,000 in the red

BOURNE End Properties incurred a loss of £796,000 in the first half of 1991, described by the directors as "a creditable performance" given circumstances in the investment property market.

It compares with a £2.27m deficit in the second half of last year and with a profit of £65,000 for the first half. The interim dividend is passed (1p) but that decision should not be taken as indication of the final directors' view. Losses per share were 8.9p (earnings 0.77p).

Interest charges were £2.44m (£1.25m). No interest was capitalised this time (£250,000).

## Improvement for Clydesdale Trust

Over the six months to September 30 net asset value at Clydesdale Investment Trust improved from 95.04p to 98.57p. A year earlier it stood at 91.82p.

In the half year total income rose from £344,000 to £396,000 and earnings per share moved ahead from 3.45p to 4.11p. The dividend is again 3.45p with an unchanged final of 2.45p.

The results excluded Wemyss Coal, a wholly-owned dealing subsidiary. It is paying a dividend of £300,000 for the year (£50,000).

## Danbury £5.8m loss after exceptionals

Danbury Group, the property and housing company, turned in an operating loss of £1.1m for the year to March 31, knocked up to a pre-tax deficit of £5.77m after a £4.69m exceptional charge resulting from writing down the value of some developments.

This compared to a £1.24m loss last time after a £2.3m exceptional charge. Turnover was down at £3.25m (£3.93m). There is no dividend (0.56p).

## W&M holds 32.4% of Invergordon

Whyte & Mackay has acquired a further 1.31m ordinary shares (1.3 per cent) in Invergordon Distillers, increasing its holding in the Scotch whisky group to 41.2m ordinary shares, representing 32.4 per cent of the equity.

### DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corresponding dividend	Total for year	Total last year
Aberdeen Steak	£1.18	Dec 20	1.3	2.7	0.75
Amber Day	£1.18	Dec 20	1.3	2.7	2
Bourne End Prop.	£1.18	Dec 20	1.3	2.7	2
Clydesdale Inv	£2.45	Jan 6	2.45	3.45	3.45
Danbury	£1.18	Dec 20	1.3	2.7	0.56
Southern News	£7.5	Nov 29	7.5	10.5	10.5
Sphere Invest	£0.9375	Nov 29	0.9375	4	3.67

Dividends shown pence per share net except where otherwise stated. SUSM stock. Total to date is 2,812.5p.

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## Tough going for Aberdeen Steak

After providing £3.3m for estimated losses on disposal of closed branches, Aberdeen Steak Houses finished 1990 with a pre-tax loss of £3.27m. The comparative profit was £186,000.

Despite the conditions in the property market a number of problems have been identified, said Mr Ali Salih, chairman. Turnover rose to £16m (£15m). Losses per share were 23.5p (1p) and there is no dividend (interim 0.75p).

Mr Salih told shareholders that work on a proposed offer for the minority shares which would take the company private have been shelved pending an improvement in the economy and completion of the disposal programme.

When mooted in August it was said the price was unlikely to be "materially different" from the 87p at which the company joined the USM in 1985. Yesterday, the shares fell 5p to 25p.

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UK COMPANY NEWS

# Waterford Foods pays £37.5m for dairy expansion

By Tim Cooney in Dublin

**WATERFORD FOODS**, the Irish dairy and food group, yesterday took a further step in its expansion strategy into Europe by acquiring Manchester-based United Co-operative Food Ltd for £37.5m.

Following its acquisition of **Foodie Foods** in 1989, Waterford will now control the second largest dairy business in the north-west of England, in a market of 7m people, twice the size of its domestic market.

Mr Stephen O'Connor, managing director, said the group's aim was "to eventually have a major business in Europe". He said the limited market in Ireland necessitated overseas expansion if the company was to survive in the face of competition in an open European market.

He said reforms of the EC's Common Agricultural Policy would oblige dairy-based food

## YJ Lovell £10m sale of Scottish housing side

By Andrew Taylor, Construction Correspondent

**YJ LOVELL**, the housebuilder and developer in which Taylor Woodrow has taken a 4.9 per cent stake, has sold its Scottish housing operation for about £10m to Ambion Homes, a private company.

The purchase price, which includes the repayment of company debt, was roughly equivalent to the net asset value of the Scottish subsidiary which, according to Lovell, amounted to £10.1m at the end of last month.

Ambion is to pay £5m immediately with the balance to be paid at the end of next March.

Lovell Scotland made pre-tax profits of £961,159 during the 12 months to end-September. It sold 140 homes during the period, accounting for 16 per cent of all house sales by the Lovell group.

Mr Trevor West, finance director, said that the proceeds would be used to reduce group debt. The company in June had expected that net debt would reach £35m at the end of September, accounting for about 55 per cent of shareholders' funds.

However, the UK housing market has not sustained the level of improvement the company had hoped for when it made the forecast.

The sale of Lovell Scotland is part of an overall rationalisation of housing operations which have been consolidated from four into two operating units based in the Midlands and the south of England.

**Dean & Bowes** sells Pannell offshoot

Dean & Bowes, the interior refurbishment group, selling its Pannell Slingsby subsidiary to reduce debt by £1.1m and cut gearing by a quarter to 60 per cent.

Pannell has been hit by the recession and did not contribute to the £735,000 half-year operating profit reported on October 17.

The consideration is £38,000 with the purchaser taking responsibility for £203,000 debt and a £1.07m overdraft.

## Into gear and on the road to a profitable future

Roderick Oram charts the progress made by David Brown under its new management

**ONLY** A few cheap silver-plated trophies on the boardroom mantelpiece, commemorating some glorious 1950s racing victories, are left of Aston Martin at David Brown, the Huddersfield engineering company.

The sports car builder and other rears were sold off in the 1970s as David Brown, gear maker to the world for 130 years, lurched from one financial crisis to the next.

But the company's real prize lies not in the boardroom but down below on the shop floors of the sprawling 16-acre site.

"Despite 30 years of mismanagement we still have a group which is a world leader with huge underlying strengths in its technology, skills and name," says Mr Chris Cook, one of the company's new owners.

Bringing out the strengths of a business stuck in the inefficient past and barely breaking even was not easy. A complete rebuilding of David Brown was necessary, Mr Cook and his partner Mr Chris Brown found when they paid £35m for the family-owned company in January 1990.

They brought with them a debt and equity package put together by Bankers Trust and considerable experience of turning round engineering companies. Mr Cook, 41, had worked at Hawker Siddeley, British Steel and TI while Mr Brown, 37 and no relation to David Brown's founding family, came via Jaguar, Lucas and GEC.

Their paths had crossed at FKL, the once acquisitive engineering group, which sparked their interest in acquiring a business for themselves. They discussed targets with Mr John Mowinkel, then of Bankers Trust, their partner in London in March 1989.

They wanted a moribund privately-owned company with annual sales of £50m-£100m. David Brown, a group they knew a fair bit about from dealings with it, far outscored other candidates. The problem was that Sir David Brown, the 87-year-old, third generation chairman, was a tax exile in Monaco and reputedly unwilling to sell.

Mr Mowinkel's father, however, was one of Sir David's neighbours. Within weeks, Mr Mowinkel junior "just happened" to bump into Sir David at a Monaco cocktail party. For

nearly 20 years he had left managers to run the company. But he could never quite let go. The average tenure of a chief executive was about 18 months. But with no family members to succeed him, he now seemed prepared to discuss a deal.

Sir David turned out to be a wily negotiator between afternoon naps and attending to other business such as building, with his young third wife, an ocean-racing catamaran in South Africa.

The incumbent management and a third party threw in last minute buy-out offers, both relying heavily on a big increase in turnover or sale of assets to pay off buy-out debt. Mr Cook and Mr Brown proposed instead to keep virtually all the business but make it more efficient so it could earn the money to realise the debt.

Of the £35m package, they supplied some 25 per cent of the £7.8m of new equity with the balance coming from Bankers Trust, Charterhouse and Morgan Grenfell. Mezzanine debt £9.2m and senior debt of £39m came from various institutions including Midland, Canadian Imperial Bank of Commerce and Bankers Trust.

Mr Cook and Mr Brown arrived in Huddersfield in January 1990 to find a badly run-down company. It was inefficient, unreliable on delivery times, tied closely to old Commonwealth markets, barely represented in Europe and poor at customer relations.

"We've tried to correct that balance," says Mr Cook. Matters came to a head last Christmas when a shop steward was dismissed for refusing to undertake some training required by the management.

The Amalgamated Engineering Union called a strike. Mr Cook and Mr Brown sat tight, even though the company was supposed to be making tank transmission spare parts for the Gulf war. The union called off the strike after three weeks.

"The future of the vehicle transmission business hung in the balance," Mr Cook says. "But we were prepared to close it down and move it."

Management ranks have also been strengthened. Three of the four divisions are headed by people who were with the company before the buy-in. But some 25 new managers have joined in financial, manufacturing and commercial areas.

Head office staff was slashed from 50 to seven with functions devolved to the four operating divisions. Some 400 were cut from the factory floor to leave a total workforce of 1,850. Many shop floor practices were changed: turnover per



Chris Cook (left) and Chris Brown: seeking acquisitions

employee is £65,000 against £42,000 the year before the buy-in.

After years of weak management, the unions were strong. "We've tried to correct that balance," says Mr Cook. Matters came to a head last Christmas when a shop steward was dismissed for refusing to undertake some training required by the management.

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Brown's finances was easier. Mr Cook and Mr Brown planned in their first year ending January 1991, to slightly reduce turnover from £72.8m (it rose to £74.7m), take £3m out of stocks and debtors (they took out £5m), generate £6.5m in operating profits, up from break-even a year earlier (they made £8m and reckoned the recession cost another £1.5m), repay £3.5m of senior debt (they repaid £10m) and end up with a £5m overdraft (they had £3m cash). Gearing fell from 300 per cent to 50 per cent with interest covered three times.

"Our performance in the first year exceeded our wildest dreams," says Mr Cook. The improvement continues. In the current first half they made operating profits of £4.7m and pre-tax profits of £3.4m on turnover of £40.5m. For the full year they are forecasting £5.5m operating profit on turnover of £33m and zero gearing.

Having completed phase one - "getting the bloody thing financially viable" - they are now starting phase two, recapitalising the business. The present capital structure holds until January 1993 but then the institutions have the right to take out their equity.

"They're all very happy with our performance but some might want to realise their profits," Mr Cook says. Four strategies are being considered:

- reversal into a listed company;
- borrowing to buy out the institutional shareholders, the least attractive option;
- sell out;
- float David Brown.

Two important factors are: "We want to continue our role at David Brown and our industrial careers," says Mr Brown. "Utopia would be to merge with another engineering and manufacturing company with overseas synergies so we could export our management strengths to that company," says Mr Cook.

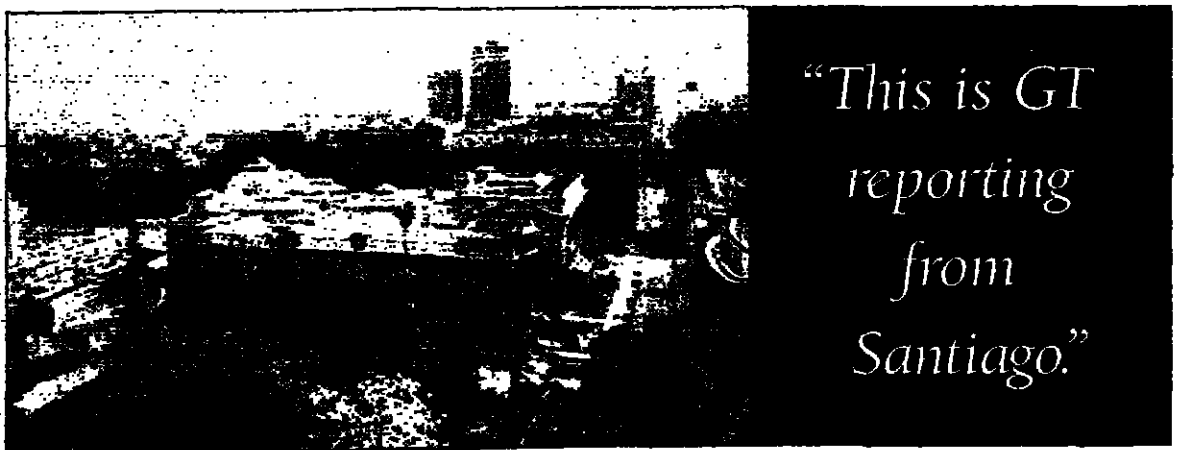
Plenty remains to be done at David Brown but it is once again a robust base to build on. Mr Cook and Mr Brown, helped by Mr Mowinkel, a board member and now with First Chicago, are looking for acquisitions.

Says Mr Brown of their success to date: "Nothing we did was particularly clever or unusual. It was just about managing a business properly - and buying the right one."

## GT CHILE GROWTH FUND

### OCTOBER REPORT

"The Chilean market performed extremely well during the month of September, the local IGPA index registering a gain of 14.4%."



The extract above was taken from the October report on the GT Chile Growth Fund Limited. A report on the progress of the Fund is, in fact, issued every month.

Following the reforms undertaken by the Government of Chile, the stock market has responded with an increase of 287% in dollar terms in the last two years (source: GT Capital Management Inc to 30.9.91).

The net asset value of the GT Chile Growth Fund has grown by 159% in the last 12 months and by 173% since its launch on 15th February 1990 (source: GT Management PLC to 30.9.91). Past performance is not a guide to the future.

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Its investment objective is to achieve a total return in dollar terms, comprising income and capital gains, primarily through investment in equity and debt securities.

The Fund is denominated in US dollars and domiciled in the Cayman Islands. It is listed on the London Stock Exchange. Foreign currency fluctuations may affect the value of your investment.

The price of the ordinary shares is published in the Financial Times. The net asset value per ordinary share is published regularly on The Stock Exchange's Company News Service.

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To: Lucy Fountain, GT Management PLC, FREEPOST, London EC2B 3DL. CALL: FREE 0800 212274. Please send me further information and regular monthly performance reports on the GT Chile Growth Fund Limited. ☐ I am already a shareholder of the GT Chile Growth Fund Limited. ☐

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## COMMODITIES AND AGRICULTURE

## China to join tin producers' association

By Kenneth Gooding, Mining Correspondent

CHINA, THE world's second-largest tin producer, is joining the Association of Tin Producing Countries, the association that is attempting to stabilise the market by setting export quotas to compensate for the huge stocks that have been hanging over the market since the 1985 collapse of the International Tin Council's price support scheme.

Analysts suggested yesterday that China's move might have a short-term favourable impact on tin market sentiment and should in the longer term give the association more control over supplies when prices started to rise again.

However, the London Metal Exchange price of tin for immediate delivery last night closed \$12.50 down on Friday's level at \$6.55 a tonne.

Depressed by overhanging stocks, tin prices have been exceptionally low and this has forced Malaysia and Thailand to cut output by nearly one-third and caused widespread mine and smelter closures throughout the rest of the world.

China will join Australia, Bolivia, Indonesia, Malaysia, Nigeria, Thailand and Zaire in the ATPC which is working to cut stocks, but has already sold 45,000 tonnes, to below 20,000 tonnes.

The ATPC set members an export limit of 95,849 tonnes for 1991. It is considering a proposal that quotas should be cut

by 9 per cent in 1992. The association suggests that China exported 15,844 tonnes of tin concentrates last year, up from 10,000 tonnes in 1988.

Mr Gnanaraj Kartasamita, Indonesia's mines and energy minister, said at the association's meeting in Canberra yesterday that this target should be reached in two years.

Mr Fidelis Madava, analyst at the Commodities Research Unit, said China's move was "a vote of confidence in the ATPC". He pointed out, however, that the tin market's main concern was Brazil, now the world's biggest producer, and Brazil had still to be persuaded to join the producers' association.

Mr Andy Shaw, at Metals & Minerals Research Services (MMRS), said that Brazil remained the key element in the market although its output was likely to fall below 30,000 tonnes this year.

The tin market was also suffering from the total collapse of exports to the former Soviet Union which used to take 15,000 to 16,000 tonnes of tin a year from western producers.

Mr Shaw said that, despite the Soviet problems, it was likely that "by the end of 1992 the tin stock overhang might show clear signs of having disappeared and, in the absence of a rapid response from producers, prices could yet set \$5 a lb (\$11,020 a tonne) in the latter stages of that year."

## Squabbles delay Soviet oil and gas development

By John Lloyd in Moscow

SQUABBLES between officials at local and state level is delaying the award of the contract to exploit the rich oil and gas reserves off Sakhalin, in the Soviet Far East. Leading contenders for the contract, worth over \$6bn, said yesterday that they expected no decision until next month.

Reports in the Soviet and Japanese press over the past few days have indicated that a decision has been made either in favour of a consortium made up of the US Exxon Corporation and Sodeco, a majority state-owned Japanese oil exploration group, or the "3M" consortium made up of Marathon and McDermott of the US and Mitsui of Japan. However, a representative of Sodeco in Moscow, Mr Shigeru Moriyama, said last night: "We want a decision, like everyone else". The failure to agree so far stems from the chaotic situa-

tion in the industry's governing bodies - the old Soviet Ministry of Oil and Gas is dismembered and largely reformed into Russian-level structures. At the same time, a committee in Sakhalin is claiming the right to have the final say on granting the concession.

The Sakhalin field, the exploration of which had been entrusted to a Japanese consortium - including Sodeco - in the 1970s before being stopped after disagreements, is estimated to have a capacity of between 5m and 7m tonnes of oil a year over a 20-year productive life, and 15m-20bn cubic metres of natural gas.

The price of the Organisation of Petroleum Exporting Countries' basket of seven crude oil moved closer to the \$21-a-barrel reference price, averaging \$20.76, up from \$20.50 the previous week.

Compiled from Reuters

## London Markets

## SPOT MARKETS

Crude oil (per barrel FOB) + or -

Dubai \$19.05-9.10c +0.25

Brent Blend (dated) \$22.50-2.60

Brent Blend (Dec) \$22.50-2.60

WTI (1st mt) \$23.75-3.80c +0.5

## Oil products

(NWS prompt delivery per tonne CIF) + or -

Premium Gasoline \$229-240

Gas Oil \$229-229

Heavy Fuel Oil \$229-224

Naphtha \$229-224

Petroleum Argum Estimation

Other + or -

Gold (per troy oz) \$334.4

Silver (per troy oz) \$410.0

Platinum (per troy oz) \$571.0

Palladium (per troy oz) \$586.35

Copper (US Producer) \$110.25

Lead (US Producer) \$30.0c

Tin (Korea Lumpur market) \$14.80

Tin (New York market) \$29.50

Zinc (US Prime Western) \$22.15

Cattle (live weight) \$104.15p

Sheep (live weight) \$124.45p

Pigs (live weight) \$74.82p

London daily sugar (raw) \$234.8

London daily sugar (white) \$237.0

Tea and Lyle export price \$240.5

Barley (English feed) \$117.0

Maize (US No 3 yellow) \$140.0

Wheat (US Dark Northern) \$171.0

## SUGAR - London FOEX

Raw Close Previous High/Low

Dec 200.00 200.00 200.00 192.00

Mar 191.00 191.00 191.00 188.80

May 192.00 189.00 192.00 187.00

Aug 198.00 198.00 198.00 191.00

White Close Previous High/Low

Dec 284.0 283.5 284.0 282.5

Mar 280.0 280.0 280.0 278.5

May 281.0 280.0 281.0 280.1

Aug 281.0 281.0 281.0 280.5

Oct 285.0 285.0 285.0 287.5

Dec 287.0 286.5 287.0

Turnover: Raw 141 (215) lots of 50 tonnes.

White 168 (225) lots of 50 tonnes.

Paris-White (FFR per tonne): Dec 1643.75, Mar 1640.34 (latest)

Turnover: 7419 (18712)

GAS OIL - BRE

Close Previous High/Low

Nov 224.50 224.50 224.50 224.00

Dec 224.25 224.00 224.00 224.00

Jan 224.25 224.00 224.00 224.00

Feb 212.50 212.00 212.50 211.50

Mar 202.75 202.00 202.75 201.50

Apr 198.00 198.25 197.25 195.20

May 198.00 198.00 198.00

Jun 198.25 198.00 198.25

Turnover: 19916 (10822) lots of 100 tonnes

TEA

There was more general demand than of late for tea, with the tea brokers' Association, East and good medium

Assams not strong demand and were often 5 to 10p higher, sometimes more. Lesser

sorts also sold more readily, except the

plains which were again neglected. The

few central Assams available ruled firm.

Ceylons were well supported with higher

types 5-6p up, medium steady, Olfactory

## Surveying Britain's 100,000 forgotten farmers

Bridget Bloom reports on a study of holdings that are too small to figure in official statistics

THE TYPICAL English farmer owns 25 acres and makes a profit of £200 a year. True or false?

True and false. According to a new study that appears to turn on its head the conventional wisdom that Britain has the largest and most efficient farms in Europe, very small farms constitute more than 40 per cent of all agricultural holdings in the UK.

The study, conducted by the agricultural departments of ten British universities over the last four years, has produced some superficially astonishing conclusions.

According to Professor Tony Giles of Reading University, one of the survey's principal authors, out of the UK's 240,000 holdings, at least 100,000 fall into the very small farm category, averaging no more than 11 hectares (27 acres).

What's more, "in England in 1988 the average net farm income on these holdings was a mere £300, falling to £200 in 1989". Yet "off-farm income averaged £12,500 in 1988, rising to £13,500 in 1989", the study's last report says.

Yet these small farms are in another sense quite atypical of British farming. In the four survey reports highlighting great variations among small farms, while also identifying key characteristics that apply to virtually all of them.

Least typical are what the survey terms "amenity farming", most frequently found in the "stockbroker" belt in southern England. Here, in counties like Kent, Sussex and Surrey, where land values are highest and unemployment has been the lowest in the UK, around 50 per cent of the small farms fall into this category.

Lands and buildings are acquired with a desirable house and "agricultural activities carried out are largely for pleasure", the study finds.

In these richer areas about a quarter of the remaining holdings belong to retired people, while high-profit commercial holdings (mainly garden centres and associated nurseries) are also important. Of less significance are small farms with low incomes on which farmers



Garden centres and nurseries are among the most profitable of the very small holdings

different sample in 1988-89.

Although the survey's academic authors are chary of hard and fast conclusions and avoid political judgments, the four survey reports highlight great variations among small farms, while also identifying key characteristics that apply to virtually all of them.

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are dependent.

In parts of the country, however, this situation is reversed. In Wales nearly a quarter of the farms in the survey have a "very low" standard of living with "an element of struggle in making ends meet financially".

Two-thirds of the Welsh farmers are over 50 years old, a third over 65 and many are in poor health or unemployed. In the south-west - including Devon and Cornwall - very small farms constitute 30 per cent of all agricultural holdings and although two-thirds of the farmers interviewed were over 50 years old "there were also a significant number of younger farmers and families with dependent children."

While in economic terms farm incomes are generally very low, averaging only £242, the cash income provided a very useful - even essential - supplement to other non-farming sources of income.

On average, non-farm income in the south-west, two-thirds of which came from waged employment, was £9,356 in 1989, says the report.

In the same year, equally low incomes were registered for very small farms in eastern England - which also includes some of the biggest and richest farms in the UK. Average net small farm income there was £300, with non-farming income an annual £9,200.

According to the report "most farmers could not even subsist on these farms if they did not have outside sources of income. Even this, at between £7,000 and £15,000 a year including unearned income, was small by national household income levels". The report adds that small farmers across eastern England also had to find average interest payments of nearly £2,400 a year.

Across the country therefore, despite variations of geography, soil and type of farming (very small dairy farmers for example have generally performed better than mixed farms), a picture emerges of part-time farmers operating at the margins of commercial agriculture.

This impression is enhanced

by the characteristics they share: time and again the survey refers to poor management. While farmers and their spouses spend almost as many hours working on the farm as on their other jobs, farm profits are virtually non-existent.

Yet in one of its most telling observations the report notes that while many may have become small farmers because they hoped that would be the first step on the ladder to bigger and better things, they were relatively content with their present lot. "There does not appear to be a permanent class of small farmers... one aspires to, rather than belongs to the small farmer class," the report says.

If this observation is correct, Britain's very small farmers are clearly not a downtrodden peasant class. Yet neither are they, despite some similarities, quite like the Bavarian part-time farmer who also earns a hefty salary each month from, say, BMW and gets substantial support from the state.

Although the report has sadly few details, Britain's small farmers are so far at the margin that they appear to benefit very little from the annual (£300m) budget of the European Community's Common Agricultural Policy. As the report puts it "the study identified few holdings whose occupiers could claim, because of primary dependence on farming as a livelihood, to be valid targets of agricultural support".

However, whether or not this means that they have no political significance as the EC strives to reform the CAP is open to question. Farm Commissioner Raymond MacSharry's proposals quite clearly favour Europe's small farmers, both by compensating them for the most severe price cuts and by offering "production neutral" aid. This emphasis on the small farmer, which pleases much of the EC, is the principle reason why the proposals have evoked such hostility from the UK, where according to official statistics, there are some 120,000 commercial

holdings but 29,000 farmers account for 55 per cent of total production.

Observers suggest that Britain's very small farmers could gain substantially from the MacSharry reforms. Mr Sean Rickard, the National Farmers' Union's Chief economist, believes this to be the case, although, not surprisingly, he deplores the possibility that as a result "very large chunks of public expenditure could be devoted to people who are no more dependent on farming than you or I".

David Curry agrees. "It is quite clear that Britain's very small farmers do not need aid from Brussels, since they have already chosen to work the land without profit," he says.

Ministers and NFU officials both argue that very small farmers have a role, albeit often a passive one, in the restructuring of Britain's agriculture. Mr Rickard for example points out that very small farms have grown in number, though declined in area, over the last decade, as middle sized farms are split up to become small holdings and parts of larger farms.

Ministers will certainly resist pressure to increase aid to the very small farmer, even if they have not yet produced policies to cope with the environmental and other implications of what the report says are their "distinctive" role in the countryside.

A further question remains for policy makers: if so many of Britain's farmers have been able to remain on the land and yet find most of their income from outside farming, have the fears been exaggerated of the effect of agricultural reform and of declining farm incomes that this will bring?

Is it possible that as farm incomes decline, more farmers will become part-time, looking after the land but otherwise not being a burden on the taxpayer?

Very Small Farms "A Distinctive Role" is the last of four reports published in 1991 by the University of Reading's Department of Agricultural Economics and Management.

## Iran becomes biggest customer for Sri Lanka's tea

By Mervyn de Silva in Colombo

IRAN HAS displaced Iraq as the biggest buyer of Sri Lankan tea. However, both Iraq and Jordan are once more active bidders at the Colombo tea auctions.

There was a sharp fall in Iraqi and Jordanian tea purchases soon after the Gulf crisis and Iran has stepped into Iraq's long established position as the top tea buyer.

In the first eight months of the year, Iran bought 22.3m kg, says Forbes and Walker, leading broker. Jordan came

second with 19.8m kg. "This improvement is astonishing," says the broker's report. "In the first five months, the total shipment was only 8m." Jordan purchased a mere 3.3m kg in the first eight months of 1990. Tea traders argue that this "spectacular rise" could have only one explanation. Jordan has been buying tea for Iraq after the United Nations trade embargo, said a Sri Lankan agent for a Cairo-based firm. In the first eight months of 1991, Egypt came third.

Tea production rose sharply in July and August and it is possible that last year's record crop of 33.2m kg will be bettered. Forbes and Walker doubt that production will decline in the final quarter. Tea exports, which totalled nearly 139m kg, earned Sri Lanka SR 12.1bn, (about \$300m). In the same period last year, Sri Lankan tea exports earned SR12.8bn.

Although there was "strong Middle-East buying in the first fortnight of October, particu-

larly by agents for Syrian buyers, Iraqi buyers were absent," said Forbes and Walker. The average price of tea of all grades fell by about SR1 per kilo (12.5c). High-grown tea prices fell by about 15.5 per cent.

While the 1990 record production of 33.2m kg (two hundred and thirty three point eight kilos) may be bettered, there has been a decline in the harvest of high- and medium-grown teas, which fetch higher prices than the low-grown.

## Barbadian sugar problems

By Canute James in Kingston, Jamaica

THE BARBADIAN sugar industry has been temporarily shut down because it has run out of money, and there is a danger that the island will be able to meet its European Community and United States quotas for the current crop year.

Barbados Sugar Industry, a privately-owned company, has closed its three mills, which were being made ready for the start of the harvest in three months time. It owes US\$87.5m to the state-owned Barbados National Bank, has had its

lines of credit cut off. "The company is seeking a foreign loan of \$8m to allow it to reopen the mills in time for the start of the harvest. "Within the last few weeks, the situation began to reach crisis proportions when the industry's major bankers advised that they were not in a position to meet the industry's entire financial requirements," the company said. A delay in the start of milling will threaten shipment of the country's 54,000-tonne EC quota.

## WORLD COMMODITIES PRICES

## COCOA - London FOEX

Close Previous High/Low

Dec 740 730 750 740

Mar 760 750 780 760

May 820 810 840 820

Aug 840 830 860 840

Oct 860 850 880 860

Dec 880 870 900 880

Turnover: 2558 (5150) lots of 10 tonnes

ICCO indicator prices (5000 lbs per tonne). Daily price for Oct. 18 980.33 (955.36) 10 day average for Oct. 21 989.08 (972.85)

## COFFEE - London FOEX

Close Previous High/Low

Nov 555 545 565 555

Mar 565 555 585 565

May 575 565 595 575

Aug 585 575 605 585

Dec 595 585 615 595

Turnover: 2170 (2500) lots of 5 tonnes

ICO indicator prices (US cents per pound) for Oct. 18 58.00 (57.00) 10 day average 62.12 (62.00)

## POTATOES - London FOEX

Close Previous High/Low

Dec 131.4 128.8 131.7 131.0

Apr 131.4 128.8 131.7 131.0

Turnover: 186 (280) lots of 20 tonnes.

## SOYABEANS - London FOEX

Close Previous High/Low

Dec 132.80 132.50 132.80

Turnover: 1 (25) lots of 20 tonnes.

## FRESH - London FOEX

Close Previous High/Low

Oct 1888 1885 1870 1885

Dec 1888 1885 1870 1885

Jan 1717 1720 1710 1716

Apr 1717 1718 1720 1716

Oct 1693 1693

Turnover: 293 (200)

## GRAINS - London FOEX

Close Previous High/Low

Nov 118.00 118.50 118.00 118.40

Dec 122.00 122.00 122.00 122.00

Jan 125.00 125.00 125.15 125.00

Apr 128.10 128.10 128.00

Turnover: 128 (128) lots of 100 tonnes.

## FIBRE - London FOEX (Cash Settlement) p/kg

Close Previous High/Low

Nov 35.5 35.5 35.5 37.0

Dec 35.5 35.5 35.5 37.0

Jan 35.5 35.5 35.5 37.0

Turn



## LONDON STOCK EXCHANGE

## Share prices slide as confidence wilts

By Terry Byland, UK Stock Market Editor

SUSPICIONS that Wall Street may be due for a correction, together with renewed uncertainties over the domestic political and economic outlook, drove UK equities down through the FTSE 2500 mark again yesterday. Selling pressure, moderate at first, gathered pace later when stock futures turned weaker and the new session in New York opened with the Dow Average sharply lower.

The FTSE index ended the day 25.4 down at 2,575.7, virtually the lowest point in the day. London put little faith in Wall Street's surge to a new Dow peak on Friday. UK shares opened lower and, brushing off a momentary attempt to regain the 2,600 mark, 2,600 area gave ground steadily as the session moved

Account Dealing Dates		
First Dealing	Oct 22	Oct 23
Open Dealing	Oct 22	Oct 23
Close Dealing	Oct 22	Oct 23
Settlement	Oct 23	Oct 24

Market closing may take place from 3.30 pm to 4.00 pm on Oct 23.

towards the time for the opening of the Wall Street market. The latest UK public opinion polls, published last weekend, showed the opposition Labour party with a seven point lead over the governing Conservative Party. Two economic reviews, the Confederation of British Industry's distributive trades survey and the quarterly report from the London Chamber of Commerce and Industry, gave only cool sup-

port for economic optimism. Mid morning brought the latest official data on UK retail sales, with September annualised volume 0.7 per cent down.

Early trading was featured by low trading volume as the pension funds and other big institutions backed away in the face of the generally negative mood in the stock market. It was, however, very difficult for them to sell stock in any size without accepting further discounts than they were prepared to take.

Water and electricity stocks were marked down on the political uncertainty. The gloom on the retail front brought falls in the high street store groups, although selling was no heavier in this sector than elsewhere in the market. The bid sector traded more

cautiously as dealers awaited a new move in the Ultramar takeover situation. The stock market remained convinced that Ultramar will be taken out, but perhaps not by Lasso and almost certainly at a higher price than Lasso has offered. By the end of the session, the market resumed with suggested names of a counter bidder for Ultramar.

Blue chip stocks were unsettled by London's nervousness regarding Wall Street. Mr Peter Thorne, strategist at Nikko Securities, warned that Wall Street's recent strength "is unlikely to continue" in view of perceived worries about inflation in the US.

Consequently, London was poised for flight when New York opened and the Dow Average swiftly shed 18 points.

London's blue chips quickly reacted, ICI replacing a small gain with a loss and Glaxo, Shell, BP, Reckitt & Coleman and Rank Organisation all settling lower. The weakness was emphasised by a rapid narrowing in the premium on the FT-SE December futures contract.

Seag volume was moderate at a final total of 357.8m shares compared with 551m on Friday, with Asda nil-paid contributing 40m to yesterday's total. But business increased in the second half of yesterday's session when the slide in share prices also gathered speed. In early trading, when much of the significant institutional business is normally transacted, Seag volume was thin and the 100m share total was, unusually, not reached until after 10.00am.

## FINANCIAL TIMES STOCK INDICES

	Oct 21	Oct 22	Oct 17	Oct '16	Oct 15	Year Ago	High	Low	Since High	Compilation Low
Government Bonds	86.25	86.48	86.56	86.64	86.72	79.87	87.94 (188)	82.17 (21)	127.4 (381/85)	48.18 (21/79)
Fixed Interest	96.38	96.59	96.59	96.67	96.47	88.86	97.17 (22)	90.59 (21)	105.4 (281/11)	50.25 (21/79)
Ordinary Shares	1778.2	1596.5	1588.8	1590.5	1597.5	1054.7	2108.3 (2/9)	1806.3 (16/1)	2108.3 (21)	48.4 (20/840)
Gold Mines	170.2	165.9	164.3	163.9	168.6	169.0	222.8 (11/7)	127.0 (22/2)	754.7 (156/23)	45.6 (20/1071)
FT-SE 100 share	2679.7	2601.1	2588.7	2578.0	2578.7	2127.0	2679.6 (2/9)	2601.1 (2/9/1)	2678.8 (2/9/1)	986.9 (237/684)
FT-SE Euroshare 200	1158.75	1185.60	1161.06	1158.25	1158.72	-	1158.60 (2/9)	1185.61 (16/1)	1186.60 (2/9/1)	538.62 (237/684)
©Ond. Div Yield	4.36	4.66	4.71	4.71	4.73	4.73	5.07 (2/9)	10.75 (2/9)	10.75 (2/9)	10.75 (2/9)
©Euro Div Yield	4.36	4.66	4.71	4.71	4.73	4.73	5.07 (2/9)	10.75 (2/9)	10.75 (2/9)	10.75 (2/9)

GILT EDGED ACTIVITY		
Gilt Edged	69.1	77.4
5-Day average	75.9	80.9
*SE Activity 1974, Excluding intra-market business & Overseas turnover.		
London report and latest share index:		
Tel. 0898 123001		

## TRADING VOLUME IN MAJOR STOCKS

Stock	Volume	Value	Price	Change
ICI	1,200,000	£120,000,000	100.00	+0.10
Glaxo	1,100,000	£110,000,000	100.00	+0.10
Shell	1,000,000	£100,000,000	100.00	+0.10
BP	900,000	£90,000,000	100.00	+0.10
Reckitt & Coleman	800,000	£80,000,000	100.00	+0.10
Rank Organisation	700,000	£70,000,000	100.00	+0.10
Asda	600,000	£60,000,000	100.00	+0.10
Ultramar	500,000	£50,000,000	100.00	+0.10
Water & Electricity	400,000	£40,000,000	100.00	+0.10
Confederation of British Industry	300,000	£30,000,000	100.00	+0.10
London Chamber of Commerce and Industry	200,000	£20,000,000	100.00	+0.10

## Focus shifts to Lasso

THE BID battle for Ultramar rumbled on, with Lasso shares strengthening 6 to 32 1/2 to 257.50, while Ultramar shares fell 1 1/2 to 256.00. The bid for Ultramar, which was first announced last Friday, was now being seen as a long-term bid for Lasso, rather than a short-term bid for Ultramar.

Ultramar yesterday gave a detailed rejection of Lasso's bid after receiving the official offer document.

Another story in the market yesterday was that a consortium was being formed to break up Ultramar's assets. It was rumoured that SHV's sale last Friday of its 9.14 per cent stake in Burmah-Castrol for approaching £100m was part of a plan to involve the privately owned Dutch company in the break-up of Ultramar.

Ultramar shares slipped 3 1/2 to 256.00, or a turnover of 4.1m as short-term speculators took profits. British Gas, upset by political and regulatory worries, declined 5 to 256p.

## Costain hurt

A severe downgrading by UBS Phillips & Drew inflicted the latest damage to a Costain Group share price which has fallen relentlessly since mid-July. The stock closed yesterday at an all-time low of 55p, a far cry from the 220 1/2p shares reached in March this year and the 350p recorded during the summer of 1987. Turnover in Costain totalled 1.5m shares.

The building team at UBS pencilled in a series of provisions totalling £40m, which it estimated would leave the building-to-mining group with a net loss of £20m for the current year.

Mr Khalid Nazir at UBS said he estimated the group would write down £20m for housing land, £10m on losses incurred in the Channel tunnel and £10m for commercial property.

UBS similarly pencilled in Channel tunnel-inspired provisions of £10m for the

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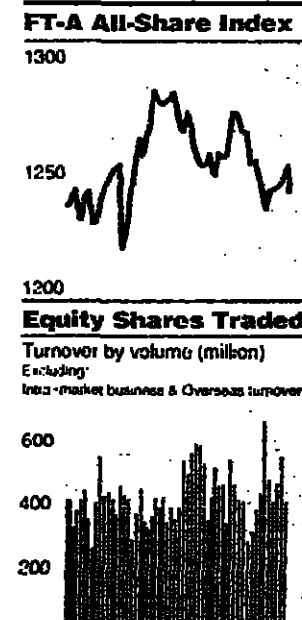
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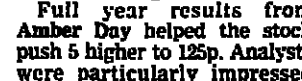
## FT-A All-Share Index



## Equity Shares Traded

Turnover by volume (million)

Including intra-market business &amp; Overseas turnover



since July, and yesterday's fall leaves the price at the level of three weeks ago.

Full year results from Amber Day helped the stock push 5 higher to 125p. Analysts were particularly impressed with the performance of the discount clothes chain What Everyone Wants. Profit-takers took 5 off Sears, leaving the shares at 98p. The stock last week ran up from 93p on a recurrence of vague bid talk.

A full-year loss of £3.27m (compared with a profit of £16.00m last time) from Aberdeen Steak Houses was largely the result of an exceptional debit of £3.2m. The dividend was passed and the shares fell 5 to 25p.

Property group Scottish Metropolitan continued the decline sparked off last week by poor figures and fears of a rights issue. County NatWest this morning publishes a sell recommendation warning of further nervousness ahead for the stock. The shares slid 12 to 75p yesterday, making a two-day drop of 30p.

Guinness weakened 15 to 102 1/2p as LVMH, the French luxury goods maker in which Guinness has a 24 per cent stake, said it intended to make a series of acquisitions.

Sentiment in Glaxo was bruised by the revelation that the company is starting legal action against a second North American maker of generic pharmaceuticals over patents on Zantac, Glaxo's best-selling drug. Analysts said the move was an indication that generics makers thought Zantac's patent protection was weak.

The stock was also hit by profit-taking after Friday's

## LONDON STOCK EXCHANGE

## BRITISH FUNDS

Fund	Price	Yield	Div	Div Date
ICI	100.00	10.00%	10.00	10/10/91
Glaxo	100.00	10.00%	10.00	10/10/91
Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/91
Rank Organisation	100.00	10.00%	10.00	10/10/91
Asda	100.00	10.00%	10.00	10/10/91
Ultramar	100.00	10.00%	10.00	10/10/91
Water & Electricity	100.00	10.00%	10.00	10/10/91
Confederation of British Industry	100.00	10.00%	10.00	10/10/91
London Chamber of Commerce and Industry	100.00	10.00%	10.00	10/10/91

## BRITISH FUNDS - Contd

Fund	Price	Yield	Div	Div Date
ICI	100.00	10.00%	10.00	10/10/91
Glaxo	100.00	10.00%	10.00	10/10/91
Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/91
Rank Organisation	100.00	10.00%	10.00	10/10/91
Asda	100.00	10.00%	10.00	10/10/91
Ultramar	100.00	10.00%	10.00	10/10/91
Water & Electricity	100.00	10.00%	10.00	10/10/91
Confederation of British Industry	100.00	10.00%	10.00	10/10/91
London Chamber of Commerce and Industry	100.00	10.00%	10.00	10/10/91

## INT. BANK AND O'SEAS

Fund	Price	Yield	Div	Div Date
ICI	100.00	10.00%	10.00	10/10/91
Glaxo	100.00	10.00%	10.00	10/10/91
Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/91
Rank Organisation	100.00	10.00%	10.00	10/10/91
Asda	100.00	10.00%	10.00	10/10/91
Ultramar	100.00	10.00%	10.00	10/10/91
Water & Electricity	100.00	10.00%	10.00	10/10/91
Confederation of British Industry	100.00	10.00%	10.00	10/10/91
London Chamber of Commerce and Industry	100.00	10.00%	10.00	10/10/91

## CORPORATION LOANS

Fund	Price	Yield	Div	Div Date
ICI	100.00	10.00%	10.00	10/10/91
Glaxo	100.00	10.00%	10.00	10/10/91
Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/91
Rank Organisation	100.00	10.00%	10.00	10/10/91
Asda	100.00	10.00%	10.00	10/10/91
Ultramar	100.00	10.00%	10.00	10/10/91
Water & Electricity	100.00	10.00%	10.00	10/10/91
Confederation of British Industry	100.00	10.00%	10.00	10/10/91
London Chamber of Commerce and Industry	100.00	10.00%	10.00	10/10/91

## COMMONWEALTH &amp; AFRICAN LOANS

Fund	Price	Yield	Div	Div Date
ICI	100.00	10.00%	10.00	10/10/91
Glaxo	100.00	10.00%	10.00	10/10/91
Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/91
Rank Organisation	100.00	10.00%	10.00	10/10/91
Asda	100.00	10.00%	10.00	10/10/91
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Water & Electricity	100.00	10.00%	10.00	10/10/91
Confederation of British Industry	100.00	10.00%	10.00	10/10/91
London Chamber of Commerce and Industry	100.00	10.00%	10.00	10/10/91

## LOANS

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Shell	100.00	10.00%	10.00	10/10/91
BP	100.00	10.00%	10.00	10/10/91
Reckitt & Coleman	100.00	10.00%	10.00	10/10/9



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3i defines investment capital as permanent and long-term capital in the form of share and loan investment in unquoted companies

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Industriales SA  
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Le Bouillon House  
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Portugal  
Telephone 3-600 11 06



# TO US THEY'RE THE SAME SIZE.

What might at first seem rather alarming evidence of defective vision is in fact a guiding principle at 3i. Over the years in which we have grown to be one of the world's leading providers of investment capital we have always tried to see the potential for growth in every business with which we have dealings.

Whatever the size of your company, our philosophy as successful investors in industry remains the same. We are looking for people with drive and ambition and a will to succeed. But at 3i we know that the best way to ensure consistent success is to produce individually tailored solutions to different problems. And as our success is ultimately based on yours, it is in our interest to do our best to help your business grow. This also means we are very happy to give long-term commitment.

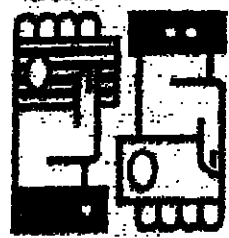
And that long-term view is another reason why we think the fish are the same size. In time your minnow could become a big fish and at every stage in this development 3i can provide the capital you need.

As long-term investors in industry, 3i has the experience that can help your business grow. If you don't fancy getting swallowed up why not get in touch with your local 3i office.



# PRIVATE BANKING

Tuesday October 22 1991



The sector grew rapidly in the 1980s as lower taxation helped to create more high net worth

Individuals, write David Barchard and Norma Cohen. What impact has the recession had on the net worth of individuals? Have private bankers adapted their strategies?

## Go-go days have gone

THE RECESSION of the 1980s has been a sobering experience for the world's wealthy and the bankers who look after their fortunes. Far from the go-go years of the previous decade, which saw an explosion of private wealth, the rich of the 1980s feel they will do well to hang on to what they have.

For these individuals, conservative management has replaced wealth creation as the the lynchpin of their private banking needs.

Private banking is the provision of investment banking services for wealthy individuals. While the services offered are no different from those offered elsewhere within commercial banks, it is the packaging and promotion that sets private banking apart.

Thus, while the wealthy will still need to have their resources managed, the pace of growth in private banking is unlikely to continue as it has over the past few years.

Last year private banking was very fashionable. Banks were attracted by a business which was growing at between 10 and 15 per cent a year, was fee driven and resistant to economic downturn. This year we are beginning to see a retrenchment. Some players are being forced to turn back to business areas which are less long term potential but offer a more immediate and visible return," says Mr Alan Hogg, Head of International Private Banking at Barclays.

In the UK, most - though by no means all - admit they have been hearing cries of distress from some customers as a result of the recession, and other upsets such as growing losses at Lloyd's of London.

"So far we have not seen much real pain at Lloyd's even though more than 9 per cent of the 'batter' bank with us," says Sir David Money-Coutts, chairman of Coutts, but UK private bankers recognise that the worst news from Lloyd's is probably still to come.

Meanwhile, in the US, the recession has forced banks to rethink the uniquely American approach they have taken towards their private banking clients. Banks there have specialised in not simply enhancing wealth, but in helping to create it. This has led to the development of the "highly leveraged individual" - a wealthy individual with substantial loans secured by illiquid holdings such as stock options or commercial real estate.

But the collapse of the US commercial property market and the sharp drop in equities values have forced banks to rethink this approach. US bankers now say that they are refocusing their efforts on more traditional investment products rather than designing new credit products for their private banking customers.

Because the private banking market is precisely that - private - the exact size of the market is difficult to calculate exactly. But Citicorp estimates that some three million individuals worldwide can be classified as very wealthy, and that these have a total of \$7,000bn in assets under management.

But despite the recession,

**Aside from the effects of recession, private banking services are being reshaped by a more sophisticated customer base and the increasingly global nature of their investments. Thus, the cost is rising**

and its ensuing effect on the portfolios of the wealthy, institutions of all sorts are still lining up to get into the business. Mr Ian Woodhouse, private banking consultant with Price Waterhouse, said: "Banks, fund management groups and other financial institutions with global expertise, related product expertise and significant distribution networks are lining up to buy traditional private banks that cannot fund the heavy investment and new

skills needed to compete in the changing environment." Mr Woodhouse argues that aside from the effects of recession, private banking services are being reshaped by a more sophisticated customer base and the increasingly global nature of their investments. Thus, the cost of providing private banking services is rising, forcing some to reconsider whether they want to be in the business at all.

Mr Lynch and Goldman Sachs have bolstered their trust operations which form the base of private client services. While they are hampered in the US by the inability to make loans of their own, some investment banks have found other arrangements to extend credit services.

And, while they have not yet become a formidable force, analysts view the investment trust and mutual fund managers as the next potential source of competition.

The growth of genuinely international private banking has been spurred by the disappearance of exchange controls worldwide. "The volatility of the US dollar in the 1980s for example has encouraged many rich Americans to manage their currency risk by seeking private banking services in London or Switzerland," says one London private banker.

Perhaps this accounts for the surprising fact that some banks report a steady stream of Latin American private client business into London. Until now customers of this kind have generally preferred to stick to the western hemisphere, Miami or New York, and US dollar accounts. Private banking has also

benefited from the general revolution under way in the banking industry, and the growing tendency to put a price tag on banking services rather than pay for them by cross-subsidising between different types of business. "The more sophisticated customer is more willing to pay for financial advice," says Sir David.

In other words, the personal customer tier of private banking is growing strongly as wealthy individuals seek better services and wider choice of products. This process can extend quite a long way down the ladder. Barclays, the largest UK bank, is offering branch customers with incomes of \$40,000 or more a year a private banking service which is in practice an investment and insurance sales operation to slightly up-market customers.

In the US, Chase Manhattan has taken a similar approach, establishing a tier of "preferred" banking client.

International private banking remains vulnerable to political upsets. The Iraqi invasion of Kuwait was followed by the flight of Arab money from the Arabian peninsula to Cairo and London, traditionally safer havens. Arab customers also began

to appreciate the advantages of offshore trusts in places like the Channel Islands, which were not subject to the blocking of accounts during the emergency.

The process has helped some private banking operations of high street clearers. "An account with Barclays or Lloyds doesn't attract as much attention as one with a glamorous private banking specialist name," says one banker.

The desire for private banking with strong local roots has helped some new entrants into the market. Adam & Co, a Scottish private bank set up in Edinburgh in 1984, has built up a strong client base in less than a decade, and without the bank office functions that a larger group could provide.

Other new markets may arise in a few years. It looks like being a few years before much private banking is done in eastern Europe or the Soviet Union, but there is a whisper

among some banks that a trickle of substantial private banking customers has started to come out of China. Relationships established now may some day produce rewards.

Traditionally, private banking was small banking business per excellence. Many private bankers today stress the advantages of belonging to a large group which can provide sophisticated treasury products and offer corporate finance to the entrepreneurs among their clients.

But harmonising the skills of the private banker with those of a global banking corporation can be tricky. "You don't want to be too big and reach a point when the name and culture of the bank can be hard to maintain," says Sir David Money-Coutts.

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There is more than just secrecy to make the Grand Duchy attractive, and bankers remain confident in the face of potentially threatening EC moves

■ Japan

In a society in which more than 90 per cent consider themselves middle class, private banking becomes a mass market business

■ Switzerland

Swiss banks still handle 40 per cent of world business, but the competition is intensifying

■ US

The recession has been sobering for bankers, and they are returning to traditional ways

Leading centres: UNITED KINGDOM

## Gloomy talk in London meeting rooms

THE RECESSION in the UK economy has delivered an unexpectedly sharp blow to private banking business in London. In genteel meeting rooms of private banks in London, conversations between clients and account executives this year are haunted by the worries of an economic downturn, illiquid assets, particularly in the property market, company failures, and the prospect of a possible Labour government.

Account executives are resigned to a year or two in which their clients will want the account to be on a preservation rather than wealth enhancement. Clients may have to be shared more than in the past, but this partly reflects their perception that good banking services are more necessary than ever.

"Now is the moment to have a good bank behind you, someone who can bank for both the man and his business. Busy people are still not always getting trustworthy advice," says Marcus Gregson, chief executive private banking at Samuel Montagu, the private banking offshoot of Midland Bank.

While some banks say they have already had clients who have been hit by losses at Lloyd's, others have not.

Coutts, with about 9 per cent of Lloyd's "names," says it has had few difficulties so far. Others even detect a counter-cyclical revival of interest in becoming a name at Lloyd's.

Yet the depression has not blunted the general belief that UK private banking is likely to get better as the 1990s advance.

Apart from the steady long term rise in personal wealth in the UK, many bankers point to the advantages London and the UK offer in private banking.

"London is a more natural

got the infrastructure. It is less expensive than Switzerland, and has a good real estate market. And it is something of a tax haven," says Mr Hap Russell of Citibank's London private banking operation.

But Barclays, the largest UK banking group, which has recently begun expanding its private banking operations, believes a shake-out in the market may not be far away. "We are beginning to see a retrenchment," says Mr Alan Hogg, Head of International Private Banking at Barclays.

**'Clients often have no idea how much the stocks and shares they own are worth, and are astonished by the values that come out'**

In a business where new customers are usually discovered through personal recommendation, the Big Four clearing banks have the conspicuous advantage of being able to expand private banking business by identifying new private banking customers from their existing branch customer bases.

Clients often have no idea how much the stocks and shares they own are worth, and are astonished by the values that come out," says an account executive at Lloyd's, one of the market leaders in the business.

He cites other reasons why wealthier individuals, with private fortunes of upwards of £100,000, might want to switch from their local branch to the more comfortable, but also far more expensive, acquisition of his office. "We can offer the

ability to keep wealth away from local eyes which can lead to a stream of begging letters from local charities - and sometimes worse," he says.

Clients may range from an old lady who has inherited several hundred thousand pounds in liquid assets and is content to live on £12,000 a year, to retired City executives with vast fortunes who want to pay others to look after the millions they have stashed away, while they themselves spend the week fishing.

The entrepreneurial failures and collapses of the late 1980s have generated private banking opportunities as well as corporate finance problems. "You usually find that the entrepreneur involved ends up with at least several hundred thousand which needs managing," says one bank.

In dealing with all these different customers, banks try to build up a strong personal relationship. Business usually goes to the private bank that gets the first telephone call for advice.

At Lloyd's, asset management extends into every financial nook and cranny, as befits a bank noted for its cost-consciousness.

"I always say: 'Don't miss the small opportunities'. We always go for them, unless the client objects," says Wynford Johns, manager of UK private banking at Lloyd's. "These would include a full £10,000 holding of premium bonds, which can be expected to yield small but useful tax free returns every month; a full entitlement of national savings certificates, and a Tessa account."

"Brokers try to flog you things, good advice costs a lot less," says Sir David Money-Coutts, chairman of Coutts & Co.

During the boom years of the 1980s, private banking was very fashionable. The last decade has seen a flow of new entrants to the private banking market. In 1984, Adam & Co set up in Edinburgh, the first new bank in Scotland for 140 years.

Adam has grown strongly and is now believed to have a client base of around 2,000.

"We were the best capitalised new bank for a long time," says Mr Ian Dalziel, director. Eighteen months ago, Midland set up its new UK private banking operation in Samuel

Montagu, which is now believed to account for a fair slice of the £10bn of private banking assets under management with the group. Mr Gregson says Midland is looking for active customers, rather than just wealth-preservers, to whom it can offer Treasury and corporate finance products from the group.

The larger players expect private banking business to grow steadily in the UK throughout the 1990s. A recent study by Price Waterhouse suggested the business is prob-

ably set to expand by 10 to 15 per cent a year.

Is it going to be a market place in which small specialists thrive, or one dominated by a few international banks? The UK clearers, perhaps not surprisingly, believe that the future lies with banks able to devote sufficient amounts of capital and human resources to the industry.

In the past, private banking was not a capital-intensive business, but the need to invest heavily in systems may have changed this. Smaller

banks, the argument goes, cannot provide the services a large group does, and they are also more easily blown off course by a few bad decisions. It is not only the large British banks which stand to benefit if this is true.

Monnaie is already marketing into the UK, offering private banking services out of Switzerland.

The combination of Swiss banking and Japanese performance sounds attractive, but the UK banks believe British customers will hesitate before

switching their money so far from home.

One important question for the London market is whether the status of the Channel Islands and Switzerland will change vis-a-vis the European Community, although there is the precedent of Luxembourg, already a member state.

Another more unorthodox question is what action private banking clients should take now against the possibility of a Labour government taking office after the next general election, and introducing policies which are likely to hurt the non-resident, non-domiciled wealthy.

"It figures in almost every conversation we have with our clients at the moment," says one banker.

David Barchard

Norma Cohen explores how far the forelock tugging will go

## Doing the creampuff stuff

SELLING private banking services to American clients is an art. Not only is there fierce competition to manage the assets of America's wealthy, but private banking clients themselves are highly sophisticated shoppers - even more so than their European counterparts, bankers say. After all, America's consumer revolution has penetrated particularly deeply into the sale of financial services, where the wealthy pay the keenest attention to the small print in the contract.

Over 3,000 US banks are trying to sell private banking services to the handful of the wealthiest individuals, making competition very fierce.

Ms Laird Grant, investment manager at US Trust, said the strongest sales pitch any private banker can make would be to talk about returns on investment. Beyond that, it is the bank's ability to service individual client needs that

attracts and retains customers. The biggest single source of new business at US Trust, she says, is referrals from existing clients.

Tales abound of the lengths to which banks go to keep their private banking clients happy. "The classic is walking the lady's dog while she's on vacation," said Mr Bill Turner, consultant at Price Waterhouse.

Some banks vigorously eschew such client massaging. "We don't do any of that creampuff stuff," sniffs Mr Jim Somers of NCNB's private bank, who also claims most business comes from referrals. Others concede that highly personalised care is a hallmark of their services.

"There's an art to being able to develop a relationship over time," said Ms Deborah Talbot, head of private banking at Chase Manhattan. In addition to having a wide array of prod-

ucts to offer clients - such as multi-currency custodial accounts - Chase takes particular care, she said, to match clients with a private banker they can feel comfortable with.

Bankers agree that the marketing of private banking services must be more subtle than that of mass banking products. Banks do advertise their services in upmarket publications such as *Forbes* or *Town and Country*, but the advertisements are intended to reinforce rather than to plug any particular service.

At Chase, for instance, private seminars on investing in art are organised with Sothe-

by's. Also, Ms Talbot said, Chase uses its connections to expand business opportunities for its clients. "Let's say a client wanted to expand into Europe. We can provide introductions to the right sort of people for him."

At US Trust, a host of activities are organised specifically to reinforce client loyalty and to help attract new business. According to Mr John Hoyer, executive vice president, the bank organises so-called "family conferences" to which entire wealthy families are invited. One of the families will make a presentation to the group about its investment strategy.

Also, the bank organises seminars, such as inviting the chief geologists from Tiffany and Co to give a chat, as well as inviting experts on trusts and estates - many of whom do business with the bank - to deliver lectures on the latest

developments. Recently, US Trust has invited its private banking clients to breakfast "chats" with US Cabinet members. US Trust has also sought to tap the captive audience of individuals cruising on the Queen Elizabeth II liner. It has employed an investment professional and a marketing professional to sell back and forth giving lectures.

But the bank, like other private bankers, does more than that. "We recently found a Unitarian minister to marry a client who was here from another country," Ms Grant said. US Trust will do everything from obtaining theatre tickets to delivering cash to children abroad.

Publicly, bankers do not care to dwell too long on the non-financial services they provide for individuals, saying that it is their expertise in the financial arena that clients want most.



## PRIVATE BANKING 2

David Lascelles explores the impact of the BCCI exposure

## A never-ending spiral of fraud

THE Bank of Credit and Commerce International will become an object lesson in how not to conduct a private banking operation.

The bank, which was shut down for alleged fraud in July, had become a caricature of private banking, taking to extremes the features other private banks like to market as qualities - a full range of services, utmost discretion, and a high level of personal attention. If you were a top-level client of BCCI, its staff would attend to your every need 24 hours a day.

But on the other hand you might also find that your accounts had been purloined to finance BCCI's latest venture. The 20-year-old bank was founded as the vision of Pakistani-born Agha Hasan Abedi to create a "bridge" between the third and first worlds. Much of the bank was geared to perform ostensibly good works, and Mr Abedi was well known for his grand philosophical discourses. But he was also an influence-seeker, and increasingly he harnessed BCCI to his ambitions to create links with powerful people, particularly third world leaders.

BCCI was also born out of a banking tradition in the Indian sub-continent which is vastly different from the west's. Mr Abedi built on the assumption that the bank should take an interest in the families and personal affairs of its clients to

create a "full service" in the fullest sense, extending all the way from the most sophisticated international financial transaction, down to the procurement of sexual services.

BCCI's private banking operations were based on the accounts of exceedingly wealthy individuals from third world countries. They included the ruling families of Gulf sheikhdoms, such as Abu Dhabi (a substantial shareholder in the bank), Dubai, Fujairah and Ajman. There were also prominent Arab businessmen such as Ghazi Pharaon, and Kemal Adham, the former head of Saudi intelligence, and controversial figures like Manuel Noriega of Panama, now being tried for drug trafficking in the US.

But this class of client could also be divided into two groups. The first, which included the ruler of Abu Dhabi, placed large sums of money with the bank, and used it to perform conventional banking services. A second group, which included Mr

Pharaon and Mr Adham, shared in BCCI's ventures by allowing their names to be used as nominees for BCCI's own investments.

For example, eight of BCCI's largest customers were lent more than \$1.4bn to enable them to buy shares in CCAH, BCCI's illegal banking acquisition in the US. According to Price Waterhouse, which reported on BCCI, these customers were under no obligation to repay the loans, and were effectively fronting for BCCI. Mr Adham was among the largest recipients of CCAH-related loans with \$450m.

But large depositors with BCCI also ran serious risks. Price Waterhouse found that BCCI diverted deposits to plug gaps in its balance sheet caused by bad lending or by trading losses. When the bank's treasury ran amok in the mid-1980s and huge losses had to be concealed, such diversions of deposits reached as much as \$1.3bn.

Some of these were deposits from wealthy clients which were never recorded as having been made. If these depositors sought to withdraw their money, the funds were simply siphoned out of another account, creating a never-ending spiral of fraudulent transactions.

Although BCCI's private banking services were supplied in its own name, they were actually conducted through a Cayman-based affiliate called

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In addition, the flow of banks establishing Luxembourg operations is drying up as the pool of eligible institutions is gradually exhausted.

For many in the banking community, however, this is no bad thing. "The aim is not to have a huge number of banks," says Mr Lucien Thiel, general manager of the Luxembourg bankers' association. "Instead of a quantitative increase, we want a qualitative increase."

Bankers are also conscious that Luxembourg may be losing its artificial attractions as a banking centre, at least compared with other centres. Withholding tax on interest income was recently cut in neighbouring Belgium, for example, and

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BCCI rocked public confidence. Investors and employees in particular were losers - scenes outside the High Court in July say it all

ICIC. The precise nature and ownership of ICIC has yet to be established, but it appears to have been the part of the bank which handled the accounts of the super rich with hundreds of millions of dollars to deposit. Though located in the Caribbean banking haven, it was actually managed from BCCI's headquarters in the City of London.

In the end, of course, all

these people lost huge sums of money when the bank was shut down with losses which have still to be calculated but clearly run into the billions of dollars.

All this, however, took place at the more lurid end of the bank's operations. There was a different and more humdrum aspect to BCCI's private banking business which was more legitimate. The management of

investments and deposits for private individuals took place as normal, and there was also a very active business servicing the accounts of Asian entrepreneurs in Europe - accounts where the personal and business interest ran in close parallel. A large part of this service included letters of credit, international money transfers and tax services.

The big question for the pri-

ate banking business is whether BCCI has damaged its image. In one sense the answer must be yes. There always lurks a suspicion in the public mind that private banking is linked to the furtherance of objectives such as tax evasion, money laundering and fraud. This will have been reinforced by the revelations from BCCI. It also seems likely that banking supervisors will be

taking a much tougher line from now on over private banking transactions which have a questionable air.

On the other hand, it is widely recognised that BCCI is untypical of the banking business in many senses. It would be wrong, therefore, to draw wide inferences. Its dramatic demise may even help to strengthen sound and legitimate end of the market.

### Leading centres: LUXEMBOURG

## The Grand Duchy remains confident

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There is, however, an increasing perception that it might be better not to stress secrecy as Luxembourg's principal private banking attraction.

"We don't want to attract customers only with these arguments," says Mr Thiel. "We hope that one day we will be able to attract customers without it."

Mr Pierre Jaans, the IML's director-general, goes further, implying that the country's apparent head-start in this

field has been exaggerated. "Luxembourg is very often taken as a showpiece of banking secrecy," he says. "Banking secrecy is good here, but it isn't had in a country like Germany or Belgium."

In short, even if banking secrecy laws are retained - and the Luxembourg government is pledged to defend them - the bankers would like to emphasise other strengths which would be less easy to sweep away with a stroke of the legislator's pen.

Know-how. After more than 20 years as a European banking centre, Luxembourg can justly boast of its high level of expertise. The challenge now is to make sure that expertise is properly channelled.

Mr Jaans stresses, for example, that the banks have to improve their productivity and the quality of service on offer to compete with other equally attractive European centres.

**Some 805 investment funds were registered by the end of last year, of which 618 qualified as UCITS**

Product exploitation. Having succeeded in cornering a large part of the Eurobond market, Luxembourg - assisted by the swift legislative action of the Grand Duchy's government - has turned to developing other

financial products aimed at the private client. In particular, Luxembourg was quick to adopt EC legislation on the clumsily named Undertakings for Collective Investment in Transferable Securities (UCITS) which allowed investment funds to be sold to residents of other EC countries.

According to the IML, some 805 investment funds were registered in the Grand Duchy by the end of last year, of which 618 qualified as UCITS.

Other centres which have aggressive and declared ambitions in that field are not making much progress, claims Mr Jaans.

These are the strengths Luxembourg bankers claim will

### Leading markets: JAPAN

## A mass market business

THE Industrial Bank of Japan's involvement in recent financial scandals and its extensive loans to a restaurant in Osaka shocked the financial community both within and outside Japan.

In the late 1980s, due to the low cost of capital, margin business with the larger companies became thinner for the Japanese banks. The new strategy was to shift the focus to a lucrative commission and fee business, targeting wealthy individuals.

Eager to make inroads on the market, IBI set up a private banking division in 1988. The bank admits lax screening guidelines led to its involvement in the scandal in which the bank lent up to ¥240bn to Ms Nui Onoue, who faces charges of procuring illegal loans to fund stock market investments.

Investment instruments a bank can offer are limited due to financial regulation which prevent banks from entering the retail securities.

Citibank, however, has succeeded in establishing its private banking division in Japan. It is one of the few foreign banks which has chosen to jump into retail banking in Japan, and now has 16 retail branches in the country, where other foreign banks such as Chase Manhattan Bank have made unsuccessful attempts at breaking into the private banking business.

**'They were just unlucky,' says one banker of the scandal-struck IBI**

However, most Japanese bankers are sympathetic. "They were just unlucky," says one banker. IBI, Japan's most prestigious bank, had not had the connections or skills to expand into personal banking, yet was under great pressure to do so as other banks rushed to target the retail market.

In spite of the focus on high wealth individuals, private banking in Japan remains quite different from that in the US and Europe, as segmentation of retail banking between wealthy and "ordinary" individuals does not exist.

In a society in which more than 80 per cent of people consider themselves middle class, Japanese banks have approached retail banking by using mass marketing strategies. Foreign bankers compare Japanese banks to supermarkets as opposed to the boutique image of the private banks in the west.

The bank has taken a

long-term view of the private business. Mr Nishihara says clients are not ready to deposit a large chunk of their assets in a foreign bank. The strategy is to develop a relationship by managing and following up cash flow business, such as overseas remittances.

Citibank's strength lies in the large amount of information coming in from its global network. Mr Nishihara says domestic institutions lack the global angle on business, and cannot provide information on overseas investments and tax laws.

Many Japanese banks which entered the private banking business in the late 1980s have been knocking on Citibank's door in order to find out what services the bank is offering. "There have been several requests for interviews from various financial institutions

including insurance companies," says Mr Nishihara. The Bank of Tokyo, which recently set up a private banking department, says the number of high net worth individuals has increased sharply, reflecting the rise in asset values and the fact that there is high demand for products.

One problem the personal banking business faces is the loose legal structure, which leaves defining the fine line between tax avoidance and evasion up to the interpretation of tax authorities.

Since private banking services offered by the Japanese banks have tended to centre on advising clients on tax avoidance schemes using legal loopholes, the ambiguity has created problems.

A recent probe by authorities into tax reports of Mr Tadao Yoshida, the president of YKK, the world's largest

maker of zip fasteners, highlighted the legal obscurity and large discretionary power of tax authorities.

The tax agency argued that Mr Yoshida had failed to declare ¥15bn in taxable income, pointing out that Mr Yoshida's reporting of an investment of 70,000 shares in the privately-held YKK into a related asset management company, Yoshida Kosen, undervalued the shares.

While some contend that Mr Yoshida had simply transferred shares in his own company at a value based on the

assessment for inheritance tax, the incident sent jitters through the financial community.

High profile figures have become wary and are more reluctant to use private banking products. And although a large demand still exists, especially for products involving off-shore investments, some foreign banks which did not want to be identified with the shadier connotations of private banking, have chosen not to enter the market.

**Emiko Terazono**

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## PRIVATE BANKING 3

Leading centres:  
UNITED STATESA shift back  
to traditional  
ways

BY ALL accounts, the flavour of US private banking has been decidedly different from that of its European counterparts. It has concentrated with equal fervour on wealth protection and wealth creation.

During the go-go years of the 1980s, however, the emphasis shifted heavily in favour of wealth creation as banks vied to provide a wide variety of credit services to help make rich people richer. Loans secured by private wealth in the form of real estate or securities became the main focus of private banking services.

But the recession of the past two years has been a sobering experience for lenders, and private banking divisions have not been exempted from the loan losses that have eaten into bank balance sheets.

Now, American private bankers say, there is a shift back to a more traditional approach, which concentrates on managing the investments

Indeed, the lower end of the market is where much of the competition has occurred, according to Mr Nigel Williams, a private banking specialist with Boston Consulting Group.

"The competition has taken place for younger, less wealthy individuals," he said.

The new private banking customers are more likely to be in their 30s or 40s, entrepreneurs with relatively low liquid assets, but with stock in a privately held company or partnership.

The traditional requirements for a private banking customer - \$1m in liquid assets and income of over \$250,000 a year - bar many wealthy individuals from the market.

Deborah Talbot, senior vice president of private banking at Chase Manhattan Bank, said that much of US private banking in recent years has concentrated on finding ways to liquidate those kinds of assets in order to enhance wealth.

"The bank that looks at private banking in the traditional sense would be left high and dry," she said.

Chase, Ms Talbot said, "has really wrestled with going downscale."

But rather than pursue less wealthy customers, Chase has established a middle tier of private banking client called the "preferred customer". While the services are not as elaborate as those offered to private banking clients, it allows Chase to package other banking services, including those of its trust department, to these individuals.

Private banking in America is a relatively recent phenomenon. The ABA's private banking committee was formed only five years ago, in contrast to Swiss and London banks which have been offering discreet private banking services for hundreds of years.

The explosion of personal wealth in the 1980s led banks to seek to fill a niche. It was discovered the market for private banking services had grown well beyond the traditional market of elderly people with inherited wealth.

Chase's Talbot notes that currently only 20 per cent of assets are passed on intergenerationally, spelling the death knell for those banks whose efforts consisted

simply of capturing "old money".

Meanwhile, as the commercial banks piled in to private banking, competition from investment or merchant banks was stepped up. It is their expertise in fund management and fiduciary services - basic private banking - that has given them an edge.

Brown Brothers, Harriman is frequently named as an investment bank providing European-style asset management in the traditional mould.

Mr Clark notes that investment banks have a competitive edge in recruiting wealthy clients because they often have an existing relationship.

For instance, the investment bank which handles the initial public offering of shares for an individual's company could well offer to help him invest and manage it.

"Investment banks are right there when the money changes hands. They can say: 'We'll manage that for you'," he said.

Several investment banks, including Merrill Lynch and Goldman Sachs, have trust departments to take on private banking functions.

Norma Cohen

## Leading centres: SWITZERLAND

## Working harder for the slot at the top

SWISS private bankers are in an unusually turbulent time, but their country's standing as the leading centre for international private banking remains intact. Although the emphasis on privacy makes it impossible to track the business statistically, most bankers accept consultants' estimates that Swiss banks handle 40 per cent or more of the assets placed under management worldwide. By comparison, London is usually given between 10 and 15 per cent, with New York slightly lower.

But the competition is intensifying. The Swiss banks' earlier comparative advantages - secrecy, a sound economy, absence of currency controls, political and monetary stability - are being eroded. Moreover, over the past two years the Swiss have had to adjust to domestic deregulation, which has started to dismantle the cartel-like arrangements that enabled them to price their services at a level high enough to ensure a reasonable living even for the laziest.

Increased competition is seen from two directions: first from the new offshore centres, and from foreign banks looking for a slice of the asset management cake; and second from price-cutting stimulated by domestic deregulation, although for the moment most

bankers say this remains a potential rather than an actual threat. The price war has not yet started.

Swiss private banking is in the throes of readjustment. "Before, we could wait for customers to come to us. Now we have to travel in search of new clients, and we have to provide an efficient, global investment service," says one Geneva banker. This situation generates lively discussion about the volume of assets a practitioner needs under management to be able to provide the services demanded by an increasingly sophisticated clientele. Banks also have to determine which clients to target: how large do individual portfolios have to be to justify the higher standard of service?

Answers differ. Some banks emphasise the development of new products; others are banking on securing higher fees by enhancing the quality of their service. Some are giving up. Over the last 12 months several small private banks have been taken over by the big three - Union Bank of Switzerland, Swiss Bank Corporation and Credit Suisse - which were already the largest players worldwide in the private banking game.

Another feature of the past year has been the consolidation among independent portfo-

lio managers who are estimated to be responsible for around 8 per cent of the assets under Swiss management. A few have merged, others have returned to the service of banks short of good investment managers. The dismantling of the cartel that determined brokerage fees has worked to the disadvantage of the smaller independent managers, because the big banks now demand that the managers

the US banking crisis, has created a separate private banking business and switched its headquarters for Europe, the Middle East and Africa from London to Geneva.

Among UK banks, National Westminster, following the earlier example of Lloyds, announced it was consolidating its private banking business - under the Coutts label - and was placing its international operations in Switzer-

land appears to be paying off. It manages \$46bn in assets worldwide, according to Mr Georges Vergnion, the French senior vice president who runs operations from Geneva. Of that figure, roughly 60 per cent represented international business. Mr Vergnion said Chase had seen a 30 per cent climb in assets under management last year and expected a similar growth again this year; the Swiss subsidiary posted a 16 per cent increase in net earnings last year.

For Mr Vergnion, Swiss private banking remains the best in the world, still very competitive in the services it offers and well positioned to hold off rivals. "They have got rid of some negative aspects, such as the reputation for money laundering and, even if Switzerland has to join the European Community, they will retain advantages in bank secrecy."

Few banks could match Chase's asset growth last year. For many, 1990 was a year of consolidation; 1991 has brought an increase in private banking business but not to the level which banks enjoyed for most of the 1980s when growth in assets under management probably averaged between 10 and 15 per cent a year.

Repercussions from the scandal over BCCI are reported. "Some clients have been

switching accounts to banks with first-class names," one banker said. On the other hand, fewer clients than expected have changed their accounts to banks offering lower charges after the dismantling of the cartel that fixed brokerage fees. This may be because competition in pricing is still only in a phony war stage; none of the big banks has yet radically changed its pricing structure. Some bankers believe, however, that the real war will start when competition intensifies.

At the end of September the federal parliament voted to ease the stamp duty charges which the banks have been claiming for years handicapped the Swiss financial centre in competition with deregulated rival centres. This reform will be more to the advantage of banks with a high share of assets from institutions or from individuals with large investment portfolios than to banks with a preponderance of lower net worth clients, but parliament's decision was welcomed as removing a clog on Swiss competitiveness. However, the partial removal of the stamp duty has still to be confirmed; the socialist party could call for a referendum on the issue.

William Dulfiorce

Focus now is on  
managing investments  
rather than lending for  
entrepreneurial  
pursuits

of the wealthy rather than lending them money for entrepreneurial pursuits.

"There has been a gradual shift towards investment and fiduciary activities, away from credit-driven services," said Mr Thomas Clark, chairman-elect of the American Bankers' Association's private banking committee.

Indeed, Mr David Van Pelt, senior vice president at Citicorp's private bank - one of the largest providers of services in the US - acknowledged that his bank, too, is shifting gears.

"There will be greater emphasis on asset management," he said.

The bank has been touting its record in asset management, producing figures showing that it has outperformed Lipper Analytical's indices in all sectors over the past five years.

On the credit side, Mr Van Pelt said Citicorp's private bank "has had a higher than normal loan loss experience in the US due to lending secured by commercial real estate".

Not only have real estate values plummeted, but many wealthy individuals secured credit based on their holdings of shares which have fallen sharply in value with the recession.

Asil Nadir, for example, was a large private banking customer at one US bank, securing loans backed by his holdings in Polly Peck International.

And while Citicorp is still firmly in the business of credit-driven private banking, it is taking a much harder look at the collateral provided. Stock portfolios are still acceptable, Mr Van Pelt said, although higher margins may be required.

Customers, too, are taking a harder look at credit quality. Mr John Hover, senior vice president at US Trust - whose capital ratios far exceed those required by regulators - said that some of the bank's new business has been spurred by a "flight to quality".

US Trust provides trust and private banking services exclusively, having given up commercial lending in 1987.

Meanwhile, other banks have decided that taking their private banking services downmarket to less wealthy individuals was a mistake.

"We're going upscale," said Mr Jim Sommers, group executive vice president in charge of private and trust banking at NCNB, America's largest super-regional bank.

"We're reducing the number of clients we take in, and revising the criteria. Private banking can't be done as a broad-based business."

It is their expertise in  
fund management and  
fiduciary services that  
has given merchant  
banks an edge

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Norma Cohen

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Life For Mopet Ltd C1000F									
	1982	1983	1984	1985	1986	1987	1988	1989	1990
Revenue	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Operating Profit	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Net Profit	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000
Dividend	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Reserves	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Capital	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Worth	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Worth Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,				

Royal Lumber Unit Ltd Mops Ltd C1000F									
	1982	1983	1984	1985	1986	1987	1988	1989	1990
Revenue	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Operating Profit	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Net Profit	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000
Dividend	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Reserves	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Capital	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Worth	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,				

Save & Prosper Group C0900H									
	1982	1983	1984	1985	1986	1987	1988	1989	1990
Revenue	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Operating Profit	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Net Profit	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000
Dividend	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Reserves	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Capital	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Worth	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,				

Schwartz Unit Trusts Ltd C0000F									
	1982	1983	1984	1985	1986	1987	1988	1989	1990
Revenue	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Operating Profit	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Net Profit	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000
Dividend	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Reserves	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Capital	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Net Worth	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Debt Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Equity Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Assets Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liabilities Ratio	1,000,000	1,000,000	1,000,000	1,000,000	1,				

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هَكَذَا مِنْ الْأَصْلِ



● Current Unit Trust prices are available on FT Cityline. Calls charged at 48p per minute peak and 39p off peak, inc VAT. To obtain your free Unit Trust Code Booklet ring (071) 925-2128.

[illegible]



● Current Unit Trust prices are available on FT Cityline. Calls charged at 48p per minute peak and 36p off peak, inc VAT. To obtain your free Unit Trust Code Booklet ring (071) 925-2128.

Company Name	Share Price	Dividend	Yield %	Market Cap	Volume
N & P Life Assurance Ltd	10.00	0.50	5.00	100.00	1000
Prudential Assurance Co Ltd	12.50	0.625	5.00	125.00	1200
Scottish Life Assurance Co Ltd	15.00	0.75	5.00	150.00	1500
Standard Life Assurance Co Ltd	18.00	0.90	5.00	180.00	1800
Swiss Life Assurance Co Ltd	20.00	1.00	5.00	200.00	2000
Union Assurance Co Ltd	22.00	1.10	5.00	220.00	2200
Western Assurance Co Ltd	25.00	1.25	5.00	250.00	2500
Yorkshire Assurance Co Ltd	28.00	1.40	5.00	280.00	2800
London Assurance Co Ltd	30.00	1.50	5.00	300.00	3000
Edinburgh Assurance Co Ltd	32.00	1.60	5.00	320.00	3200
Glasgow Assurance Co Ltd	35.00	1.75	5.00	350.00	3500
Manchester Assurance Co Ltd	38.00	1.90	5.00	380.00	3800
Birmingham Assurance Co Ltd	40.00	2.00	5.00	400.00	4000
Cardiff Assurance Co Ltd	42.00	2.10	5.00	420.00	4200
Sheffield Assurance Co Ltd	45.00	2.25	5.00	450.00	4500
Leeds Assurance Co Ltd	48.00	2.40	5.00	480.00	4800
Nottingham Assurance Co Ltd	50.00	2.50	5.00	500.00	5000
Coventry Assurance Co Ltd	52.00	2.60	5.00	520.00	5200
Warwick Assurance Co Ltd	55.00	2.75	5.00	550.00	5500
Gloucester Assurance Co Ltd	58.00	2.90	5.00	580.00	5800
Bristol Assurance Co Ltd	60.00	3.00	5.00	600.00	6000
Bath Assurance Co Ltd	62.00	3.10	5.00	620.00	6200
Exeter Assurance Co Ltd	65.00	3.25	5.00	650.00	6500
Truro Assurance Co Ltd	68.00	3.40	5.00	680.00	6800
St Austell Assurance Co Ltd	70.00	3.50	5.00	700.00	7000
St Ives Assurance Co Ltd	72.00	3.60	5.00	720.00	7200
St Erme Assurance Co Ltd	75.00	3.75	5.00	750.00	7500
St Agnes Assurance Co Ltd	78.00	3.90	5.00	780.00	7800
St Mary's Assurance Co Ltd	80.00	4.00	5.00	800.00	8000
St Michael's Assurance Co Ltd	82.00	4.10	5.00	820.00	8200
St Andrew's Assurance Co Ltd	85.00	4.25	5.00	850.00	8500
St David's Assurance Co Ltd	88.00	4.40	5.00	880.00	8800
St John's Assurance Co Ltd	90.00	4.50	5.00	900.00	9000
St Peter's Assurance Co Ltd	92.00	4.60	5.00	920.00	9200
St Paul's Assurance Co Ltd	95.00	4.75	5.00	950.00	9500
St George's Assurance Co Ltd	98.00	4.90	5.00	980.00	9800
St Mark's Assurance Co Ltd	100.00	5.00	5.00	1000.00	10000



● Current Unit Trust prices are available on FT Cityline. Calls charged at 48p per minute peak.

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## CURRENCIES, MONEY AND CAPITAL MARKETS

## MONEY MARKET FUNDS

## Money Market Trust Funds

Trust	Net Assets	Units	Price
Co-operative Bank - Central	£1,000,000	1,000,000	1.00
Co-operative Bank - Europe	£1,000,000	1,000,000	1.00
Co-operative Bank - Global	£1,000,000	1,000,000	1.00
Co-operative Bank - Japan	£1,000,000	1,000,000	1.00
Co-operative Bank - US	£1,000,000	1,000,000	1.00
Co-operative Bank - World	£1,000,000	1,000,000	1.00
Co-operative Bank - Asia	£1,000,000	1,000,000	1.00
Co-operative Bank - Africa	£1,000,000	1,000,000	1.00
Co-operative Bank - Latin America	£1,000,000	1,000,000	1.00
Co-operative Bank - Middle East	£1,000,000	1,000,000	1.00
Co-operative Bank - Oceania	£1,000,000	1,000,000	1.00

## Money Market Bank Accounts

Bank	Interest Rate	Minimum Deposit	Overnight	3 Months	6 Months	12 Months
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%
Co-operative Bank	5.50%	£1,000	5.50%	5.50%	5.50%	5.50%

## JOTTER PAD

## CROSSWORD

No. 7,678 Set by ALAN

ACROSS

1 Got the turnout to enter the competition (6)

2 On the side of the bad, though conventional (6)

3 Towards the centre, where the cases are (7)

4 To the extent that it's not put out (7)

5 Fair give one a wiggling about a minor complaint (6)

6 Conducted one in a song (4)

7 The right hand holds it to start with (5)

8 Did perform in Evita, playing an extra (8)

9 Spoon, giving an "Oo" when caught in the light (5)

10 Step one is to have a light outside (5)

11 Catching a hard crack would hurt (4)

12 Show no promise as sculptor (6,5)

13 Let's have a little quiet, at least (7)

14 Comes out and talks about rain (7)

15 Promise to put in the post (6)

16 Instructs the classes (6)

17 Down

18 Disallow a number as unimpressive (6)

19 Don't it give you a free ride (7)

20 Thought me old-fashioned about it (6)

21 Had the sweetheart got caught in the downpour (6)

22 Naturally bright performing lion - and outstanding cat (7)

23 Getting a breakthrough stop (5,4)

24 It is unsuited to the young head (6,3)

25 Having money, he is going out to get the licence (6)

26 First in premed resolved to identify the disease (6)

27 Go up and put the misadventure back in the plot (7)

28 With one hand only on the shell (7)

29 Being overcharged had hurt (6)

30 The plant, deal with ourselves (5)

Solution to Puzzle No. 7,677

ACROSS

1 DOWN

2 DOWN

3 DOWN

4 DOWN

5 DOWN

6 DOWN

7 DOWN

8 DOWN

9 DOWN

10 DOWN

11 DOWN

12 DOWN

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## WORLD STOCK MARKETS

CANADA															
Stock	Stock	High	Low	Close	Chng	Ratio	Stock	High	Low	Close	Chng	Ratio	Stock	High	Low
TORONTO															
300 pm prices October 21															
Outcomes in cents unless marked S															
11000 A&P	815	145	13				33000 Comstock	2215	234	231	+		7700 Lumber Co	845	84
12000 Agropac	485	485	600	+			40000 Copeland	185	185	185	0		8800 Laidlaw	1195	119
13000 Air Cdn	85	85	14				50000 Conestoga	1815	1815	1815	0		9900 Macmillan	1195	119
14000 Air Cdn	85	85	14				61000 Crescent	85	84	84	-		10000 Maple	1195	119
15000 Alcan	1145	145	14				72000 Crown	128	128	128	-1		11000 Maple	1195	119
16000 Alcan	1145	145	14				83000 Duff	128	128	128	-1		12000 Maple	1195	119
17000 Alcan	1145	145	14				94000 Duff	128	128	128	-1		13000 Maple	1195	119
18000 Alcan	1145	145	14				105000 Duff	128	128	128	-1		14000 Maple	1195	119
19000 Alcan	1145	145	14				116000 Duff	128	128	128	-1		15000 Maple	1195	119
20000 Alcan	1145	145	14				127000 Duff	128	128	128	-1		16000 Maple	1195	119
21000 Alcan	1145	145	14				138000 Duff	128	128	128	-1		17000 Maple	1195	119
22000 Alcan	1145	145	14				149000 Duff	128	128	128	-1		18000 Maple	1195	119
23000 Alcan	1145	145	14				160000 Duff	128	128	128	-1		19000 Maple	1195	119
24000 Alcan	1145	145	14				171000 Duff	128	128	128	-1		20000 Maple	1195	119
25000 Alcan	1145	145	14				182000 Duff	128	128	128	-1		21000 Maple	1195	119
26000 Alcan	1145	145	14				193000 Duff	128	128	128	-1		22000 Maple	1195	119
27000 Alcan	1145	145	14				204000 Duff	128	128	128	-1		23000 Maple	1195	119
28000 Alcan	1145	145	14				215000 Duff	128	128	128	-1		24000 Maple	1195	119
29000 Alcan	1145	145	14				226000 Duff	128	128	128	-1		25000 Maple	1195	119
30000 Alcan	1145	145	14				237000 Duff	128	128	128	-1		26000 Maple	1195	119
31000 Alcan	1145	145	14				248000 Duff	128	128	128	-1		27000 Maple	1195	119
32000 Alcan	1145	145	14				259000 Duff	128	128	128	-1		28000 Maple	1195	119
33000 Alcan	1145	145	14				270000 Duff	128	128	128	-1		29000 Maple	1195	119
34000 Alcan	1145	145	14				281000 Duff	128	128	128	-1		30000 Maple	1195	119
35000 Alcan	1145	145	14				292000 Duff	128	128	128	-1		31000 Maple	1195	119
36000 Alcan	1145	145	14				303000 Duff	128	128	128	-1		32000 Maple	1195	119
37000 Alcan	1145	14													

**FINANCIAL TIMES**  
EUROPE'S BUSINESS NEWSPAPER



## NEW YORK STOCK EXCHANGE COMPOSITE PRICES

A			B			C			D			E			F			G			H			I			J			K			L			M			N			O			P			Q			R			S			T			U			V			W			X			Y			Z			AA			AB			AC			AD			AE			AF			AG			AH			AI			AJ			AK			AL			AM			AN			AO			AP			AQ			AR			AS			AT			AU			AV			AW			AX			AY			AZ			BA			BB			BC			BD			BE			BF			BG			BH			BI			BJ			BK			BL			BM			BN			BO			BP			BQ			BR			BS			BT			BU			BV			BW			BX			BY			BZ			CA			CB			CC			CD			CE			CF			CG			CH			CI			CJ			CK			CL			CM			CN			CO			CP			CQ			CR			CS			CT			CU			CV			CW			CX			CY			CZ			DA			DB			DC			DD			DE			DF			DG			DH			DI			DJ			DK			DL			DM			DN			DO			DP			DQ			DR			DS			DT			DU			DV			DW	
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**NASDAQ NATIONAL MARKET**

3:00 am prices October 2

[illegible]

## 3:00 pm prices October 21

[illegible]

## EXPORT FINANCE

**The FT proposes to  
publish this survey on  
November 13 1991.  
For a full editorial  
synopsis and  
advertisement details,  
please contact:  
Richard Huggins  
Tel: 071 873 3688  
Fax: 071 873 3078  
or write to him at:  
Number One  
Southwark Bridge  
London SE1 9HL**

## FT SURVEYS

## FT SURVEYS



## AMERICA

## Profit-taking sets in as hopes of Fed move fade

## Wall Street

SHARE PRICES fell yesterday morning after bond yields had risen sharply on fears that the Federal Reserve might have postponed an easing of monetary policy, writes Patrick Horgan in New York.

By 1 pm the Dow Jones Industrial Average was down 22.36 at 3,054.79. The more broadly based Standard & Poor's was also weaker at mid-session, down 3.06 at 589.42 by 1 pm, while the Nasdaq composite of over-the-counter stocks shed 2.51 at 336.29. Turnover on the NYSE was 94m shares by 1 pm, and declines outpaced rises by almost two to one.

The morning sell-off was understandable. In the previous five days the Dow had risen by almost 100, buoyed by hopes of easier monetary policy and by better-than-expected third quarter corporate results. To many, it looked overpriced at around 3,070, and some investors took the opportunity to realise recent profits. With the likelihood of an imminent Fed ease rapidly diminishing, the pressure to sell was irresistible for some investors, and a rise in the long bond yield to

back over 8 per cent did not help matters.

Airlines, which powered the Transportation index to new highs last week, took a pounding on profit-taking. All those that rose last Wednesday on good results from AMR, parent of American Airlines, fell back yesterday. AMR lost 3% at \$63. Delta gave up 3% at \$67, and UAL slipped 1% to \$132.74. Southwest Airlines, which reported a 27 per cent decline in third quarter net profits, fell \$1 to \$28.

Owens-Corning, which fell sharply on Friday after reporting poor third quarter earnings and plans for two quarterly charges next year, dropped another 4% to \$19.40 on turnover of 2.3m shares. Merrill Lynch downgraded the stock and cut its earnings estimate. Chase Manhattan firmed 3% to \$157 after the banking group reported a sharp gain in earnings, with profits of 79 cents a share in the third quarter, compared to a \$5.03 a share loss at the same stage of 1990. Other banks were mostly weaker, with Citicorp easing 3% to \$111, BankAmerica 3% to \$42.2, and Security Pacific 3% to \$22.7, although Chemical bank bucked the trend with a gain of 4% to \$26.74.

Unigys held firm at \$44 after reporting a quarterly loss of 66 cents a share, which represented an improvement on the loss of \$2.42 in the third quarter of last year. Zenith Electronics rose 3% to \$84 on a similar turnaround in third quarter earnings, while Analog Devices jumped 4% to \$81 after news that it had developed an electronic sensor, for use in car airbags, which it claims is cheaper and more reliable than mechanical sensors currently in use.

## Canada

TORONTO stocks were mixed in moderate midday trading as the market consolidated last week's gains. The gold sector was supported by higher bullion prices. The TSX-300 composite index fell 7.54 to 3,474.80 on volume of 18.5m shares. Advances led declines by 255 to 223 with 217 unchanged.

In the gold sector, Placer Dome Inc rose 3% to \$314, American Barrick gained 3% to \$284 and Echo Bay Mines rose 3% to \$389.

Among the most active stocks, Laidlaw B shares gained 3% to \$510 and Alcan Aluminium dropped 3% to \$233.

## EUROPE

## Strikes hit Paris and Milan as Frankfurt sees takeovers

THE THREAT of general strikes worried the French and Italian bourses yesterday, writes Our Markets Staff.

PARIS retreated after unions called for a general strike to be held on Thursday. The CAC 40 index lost 18.23 or 1 per cent to 1,845.97 in turnover similar to Friday's FTSE 100.

The public sector worries and last week's long-awaited interest rate cut meant that the bourse was likely to remain subdued in the short term, said Ms Jennifer Schaps at Williams de Broe. "The small size of the rate cut means that it will have no significant impact on French industry, and it precludes further movement on rates in the short term," she said.

Lafarge Coppée, the cement maker with exposure to the US, dropped 7% to 1,336.50. Recovery in the US economy had been over-discounted in the share price, said Ms Schaps. A Lafarge unit said that it had an option to buy 49 per cent of Texas of Spain.

Scia, the trading group, plunged 7% to 11.5 on a report of 776,900 shares, on Friday's news that it plans a capital increase.

MILAN failed to hold on to opening gains. There was concern that the general strike scheduled for today would hamper trading. The Commit index rose 1.31 to 532.32 in turnover estimated at slightly more than Friday's 1,680m.

Analysts noted continued demand for telecommunications stocks. Slip put on L10 to L1,250 while Stet added L4 to L1,950. Investors were encouraged by evidence that Stet's new four-year investment plan showed annual investment levelling off at L1,000bn a year.

FRANKFURT had a quiet day in spite of takeover stories. Equities registered a technical recovery, the DAX index closing 9.43 higher at 1,572.88 after a 6.24 rise to 1,566.06 in the FAZ. Banks and the big insurers still enjoying the strength in the bond market, supported

## FT-SE Eurotrack 100 - Oct 21

Open	11 am	Noon	2 pm	3 pm	Close
1099.82	1099.69	1100.33	1100.57	1099.49	1097.89
Day's High 1101.02 Day's Low 1097.80					
Oct 18	Oct 17	Oct 16	Oct 15	Oct 14	
1099.01	1095.78	1095.87	1095.40	1088.51	

Base value 100 (1980=100)

the market. Mannesmann's takeover of 51 per cent of VDO Adolf Schindling, the measuring and control technology company, left the bidder DM4.50 lower at DM262 before it recovered to close at DM265.20.

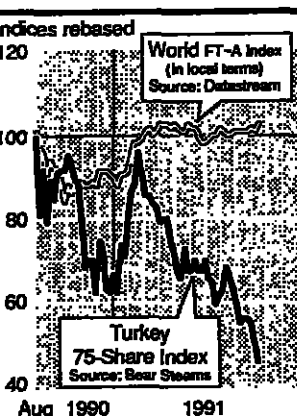
VDO was suspended. Siemens, DM2.30 higher at DM622.10, said it was sorry that its own coup of VDO had not succeeded, and then bid DM225 a share for the 22 per cent minority in Siemens Nixdorf after hours. Siemens Nixdorf was up DM2 at DM180. Before that, it had been showing a loss of more than 40 per cent on its end-1990 level.

Mr Ian Macleod, technology industries analyst at County NatWest, said that the cost of consolidating all, instead of part, of Nixdorf's expected losses this year - and of paying for the privilege - could reduce Siemens's expected 1991-92 earnings from DM49.5 to DM44.5 a share.

ZURICH, which climbed last week to the position of top European performer in the FT-Actuaries World Indices this year, in local currency terms, finished lower as Wall Street's weak start encouraged profit taking. The Credit Suisse index 0.7 pc to 510.3.

ISTANBUL fell on profit-taking after the weekend's general election, which led to the prime minister's resignation yesterday. The 75-share index, up 3 per cent on Friday, fell 56.03 or 2.2 per cent to 2,597.03 in light trading.

Mr Kaya Didman of Turk Ekonomi Bank said that the uncertainty was likely to persist until a new government was formed. Until then, the index would fluctuate around



Indices rebased the same level.

OSLO put on another 1.4 per cent after more sizeable gains last Thursday and Friday. The all-share index rose 6.57 to 481.28 in turnover of Nkr336m.

Mr David Longmuir of James Capel said that the market had recovered from the collapse of Norway's second biggest bank, and was responding to firm oil prices and shipping rates.

STOCKHOLM was lifted by strength in Volvo shares. The Affarsvärlden General index rose 10.6 to 988.8 in turnover of SKr282m.

Volvo free B shares jumped SKr13 to SKr353 following a buy recommendation from Bear Stearns, the New York broker. Mr Doug Laughlin of Bear Stearns said that, on a near-term view, the stock was undervalued relative to its asset value and that the company was poised for a sharp increase in its cyclical core business. On a longer-term view, Volvo was poised for an improvement in its US operations and from the alliance with Renault.

## FT-ACTUARIES WORLD INDICES

Jointly compiled by The Financial Times Limited, Goldman, Sachs & Co., and County NatWest/Wood Mackenzie in conjunction with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS																									
FRIDAY OCTOBER 19 1991													THURSDAY OCTOBER 17 1991												
Figures in parentheses show number of lines of stock																									
	US Dollars Index	Day's Change %	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	Local % chg on day	Gross Div. Yield	US Dollar Index	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	1991 High	1991 Low	Year ago (approx)									
Australia (69)	156.42	+0.1	134.44	128.29	137.32	130.47	+0.1	4.66	156.26	133.44	128.21	138.40	130.28	226.42	112.74	126.16	112.74								
Austria (20)	133.99	+0.8	140.95	134.51	143.96	144.29	+0.1	1.98	162.74	141.06	133.53	144.13	144.03	255.37	164.82	205.16	164.82								
Belgium (47)	128.82	+0.4	110.80	106.73	113.17	110.80	+0.2	5.35	126.47	111.35	105.40	114.77	111.04	221.20	118.04	136.75	118.04								
Canada (114)	140.23	+0.4	120.53	115.01	123.09	114.59	+0.4	3.28	138.66	121.05	114.58	123.58	114.17	142.27	126.49	132.25	126.49								
Denmark (57)	250.25	+1.4	215.00	205.25	218.88	222.25	+0.9	1.59	248.79	219.50	202.40	218.56	220.35	270.56	217.74	250.27	217.74								
Finland (15)	153.26	+0.1	131.44	124.50	133.25	122.33	+0.3	5.25	148.79	121.50	105.40	114.77	111.04	221.20	118.04	136.75	118.04								
France (109)	141.01	+1.1	121.20	115.65	123.78	127.35	+0.3	3.48	138.48	120.90	114.44	123.52	126.96	126.26	119.11	141.38	119.11								
Germany (65)	109.09	+0.9	103.09	98.31	102.25	92.25	+0.9	2.46	104.13	90.25	85.45	92.22	92.22	125.35	95.16	117.80	95.16								
Hong Kong (55)	185.52	+0.0	142.28	135.79	145.30	164.74	-0.1	4.43	165.57	143.51	135.95	148.84	164.80	169.98	119.62	121.23	119.62								
Ireland (16)	153.56	+0.1	138.99	130.55	138.19	131.38	+0.7	1.54	168.69	137.52	130.18	140.18	142.40	162.48	139.22	152.53	139.22								
Italy (71)	70.47	+0.5	60.58	57.79	61.86	68.42	-0.3	3.49	70.10	60.76	57.51	62.86	66.82	88.23	64.78	85.86	64.78								
Japan (474)	142.72	+1.4	123.52	117.87	128.18	117.87	+1.4	0.72	141.75	122.80	118.30	125.55	118.30	146.97	118.22	138.29	118.22								
Malaysia (58)	195.29	+0.4	167.85	160.17	171.43	208.57	+0.5	2.96	196.16	170.02	160.94	173.72	207.57	247.78	180.16	189.93	180.16								
Mexico (16)	1312.80	+0.4	1126.14	1078.35	1132.24	1394.35	+0.4	1.20	1307.85	1133.80	1073.08	1198.30	1378.49	1312.60	594.45	519.89	519.89								
Netherlands (31)	140.96	+0.6	121.15	115.61	123.74	122.40	+0.3	4.40	140.12	121.45	114.57	124.10	122.73	146.78	126.70	155.27	126.70								
New Zealand (14)	46.86	+0.6	40.28	38.44	41.14	43.93	+0.6	6.82	47.14	40.86	38.06	41.75	44.15	54.94	41.18	54.34	41.18								
Norway (31)	190.05	+2.2	163.35	155.88	165.84	171.03	+1.7	1.65	185.87	161.11	152.51	164.82	168.15	223.24	178.38	240.13	178.38								
Singapore (38)	191.43	+0.0	164.53	157.01	169.05	148.35	+0.0	2.31	191.48	165.97	157.11	169.58	148.39	208.25	151.63	157.48	151.63								
South Africa (51)	247.47	+0.3	212.69	202.96	217.24	170.37	+0.2	2.82	248.18	215.11	203.02	219.79	170.05	255.85	173.00	160.25	173.00								
Spain (59)	153.80	+0.1	130.49	124.50	133.25	122.33	+0.3	3.49	138.48	120.90	114.44	123.52	126.96	126.26	119.11	141.38	119.11								
Sweden (25)	180.51	+1.0	155.14	148.05	158.46	164.81	+0.4	2.71	178.72	164.91	148.54	158.28	164.10	204.12	148.90	172.61	148.90								
Switzerland (59)	95.42	+1.8	82.01	78.27	83.78	87.29	+1.0	2.21	93.70	81.21	76.88	83.03	86.47	100.87	82.17	95.13	82.17								
United Kingdom (240)	179.51	+1.3	154.37	147.30	157.65	154.37	+0.4	4.83	177.35	153.75	145.53	167.08	155.75	187.44	156.27	153.80	156.27								
USA (329)	163.44	+0.1	137.03	130.77	139.57	150.44	+0.1	3.03	163.24	138.02	130.66	141.04	150.24	161.02	125.35	125.10	125.35								
Europe (827)	136.85	+1.1	120.20	114.70	122.78	122.08	+0.3	3.59	136.34	119.91	113.31	122.53	121.74	151.52	125.50	138.50	125.50								
Europe (100)	137.78	+0.1	121.16	115.61	123.74	122.40	+0.2	2.82	140.12	121.45	114.57	124.10	122.73	146.78	126.70	155.27	126.70								
Pacific Basin (718)	143.53	+1.3	122.70	116.05	126.35	119.05	+1.2	1.05	142.14	123.20	116.83	125.89	117.82	145.82	117.98	137.86	117.98								
Euro-Pacific (1545)	142.86	+1.2	122.61	117.00	125.23	121.11	+0.9	2.17	140.98	122.19	115.88	125.85	120.08	147.86	121.29	138.49	121.29								
North America (540)	158.17	+0.1	135.94	128.74	138.87	156.40	+0.1	3.04	157.85	136.81	128.81	138.91	156.18	159.89	125.91	125.52	125.91								
Europe Ex. UK (257)	116.43	+1.0	100.07	95.51	102.23	103.64	+0.2	3.25	115.31	99.95	94.63	102.15	103.44	129.80	103.58	122.53	103.58								
Pacific Ex. Japan (244)	145.50	+0.0	121.40	116.05	126.35	119.05	+0.0	4.29	145.97	122.62	115.78	125.29	128.33	147.80	111.40	120.32	111.40								
World Ex. US (1739)	144.39	+1.1	124.10	118.43	126.78	122.41	+0.8	2.22	142.77	123.75	117.15	126.45	121.41	146.16	122.32	138.41	122.32								
World Ex. UK (2022)	145.40	+0.7	124.97	119.26	127.61	131.96	+0.6	2.25	144.58	122.14	116.47	127.98	131.19	145.77	120.05	136.75	120.05								
World Ex. So. Af. (2201)	147.74	+0.8	126.98	121.19	129.71	133.78	+0.6	2.51	146.80	127.10	120.30	128.85	130.65	146.66	122.92	132.75	122.92								
World Ex. Japan (1786)	152.29	+0.5	130.98	124.91	135.71	142.84	+0.2	3.40	151.61	131.04	124.39	134.28	142.58	158.25	126.98	130.98	126.98								
World Ex. Japan (2282)	148.39	+0.6	127.54	121.71	130.27	134.08	+0.6	2.51	147.26	127.84	120.83	130.43	133.33	149.01	123.26	132.96	123.26								



ber 22 1991  
Americas

# NETWORKING AND OPEN SYSTEMS

SECTION III

Tuesday October 22 1991

**The computer industry and its customers have been shaken and confused by the speed of development of the open systems movement. Yet the emergence of industry-wide standards promises a new era of efficient and effective computing, writes Alan Cane**

## The age of the answer

THE GLOBAL computer industry is in crisis with a majority of companies showing reduced sales and profits. A major cause is the rapid rise of open systems which are forcing down hardware prices. Computer users worldwide are faced with a bewildering choice of computing options and many are holding back from further investment in data processing until the confusion dies down. Again, a major cause is the growth of open systems.

It is ironic that open systems are harming computer suppliers and confusing customers; they have been heralded as an important stage in the maturation of the modern computer industry, yet seem to contain the seeds of its destruction.

From the customers' point of view, open systems should open the door to a new era in efficient and effective computing. Open systems should give them "freedom of movement" in three key areas: portability, compatibility and scalability. Portability will give them the freedom to move across different computer makes and models. Compatibility will give them the freedom to move easily from one open system to the next as technology



changes. Scalability will enable them to move between systems of different sizes.

Mr Geoffrey Morris, president of the international X/Open group which "kitemarks" open systems-compliant products, points to the masses of data trapped in "closed and isolated information ghettos of government and corporate systems around the world."

"We have got to get out of those information ghettos and get rid of the constraints. Until now people have been able to ask questions of information systems but they seldom have been able to get the right answers - or even an answer that is close to their question. Tomorrow has got to be the age of the answer."

But first the confusion will have to be dealt with. Open systems can be defined in as many ways as there are people prepared to commit themselves to a definition. There are, in addition, geographic variations. In Europe, the term traditionally means computer systems which obey the rules of open systems interconnection (OSI) and so can be easily connected together. In the US, an open system is more likely to be taken as meaning one which uses the Unix operating

system or one of its variants.

To all intents and purposes, however, "open" in computing terms simply means obeying agreed industry-wide standards. Virtually every manufacturer of hardware or software now claims to offer open systems. From the customers' point of view, it often seems as if every manufacturer is offering a different open system, and therein lies the confusion.

The personal computer operating system MS-DOS is an open system, although one imposed on the industry through the success of the IBM personal computer rather than agreed by industry participants. Some 35,000 computer programs have been written to run under MS-DOS.

Nobody could pretend that it has much elegance as operating software, but any software developer writing an application programme to run under MS-DOS knows there is a huge market for his efforts.

The development of the open systems movement occurred in two phases, the first chiefly concerning OSI, a long-drawn-out battle by the world's standards bodies to establish the rules of the game, the second a frantic jockeying among the major computer groups to become associated with which ever version of the Unix operating system will become the world standard.

OSI is a set of rules which sets out in detail how computer systems of different manufacture should be connected together if they are to function as part of the same network.

Before the world's standards bodies had begun work on OSI, international Business Machines, which has been responsible for imposing more standards on the data processing business than any other manufacturer, had developed its own rules, Systems Network Architecture (SNA) for the interconnection of IBM

systems into networks. Companies wishing to attach their equipment to IBM networks had to obey SNA rules.

There was, therefore, powerful pressure, especially from European computer companies, to establish OSI as the world interconnection standard, so depriving IBM of its advantage and "levelling the playing field."

The Unix bandwagon developed out of the increasing power and complexity of microprocessor chips, and the need to find an operating system for small and medium-sized companies capable of utilising the power of the new chips while free from the controlling influence of any single manufacturer.

The operating system - an internal traffic policeman that controls flows of information through the computer and allocates resources like disc drives - is critical to the kind of software a computer can run. The leading software developers want to write programs for the broadest possible market - in other words, for the most successful operating system.

Systems built from standard microprocessor chips and running a standard Unix operating system command inherently smaller gross profit margins than proprietary systems.

Even if its installed base is quite small - figures suggest that spending on Unix-based systems may be only 16 per cent of the total hardware investment in the US at present - the presence of low-cost, powerful Unix machines in a manufacturer's catalogue has the effect of depressing the price of proprietary systems.

Ms Pauline Swift, a senior consultant with the Pro-grammes Group, argues that as hardware is becoming more marginal to the creation of value in computing, defining how computers are used and not how they are manufac-

tured is becoming a key point for computer vendors. She says computer makers must now compete on utility rather than power.

■ monopolise sources of added value.

■ maximise the sophistication of the value delivered while minimising the sophistication of the technology.

In the past few months it has been brought home with increasing force to computer companies that too strict an adherence to standards is a self-limiting strategy. At a certain point, a company cannot be more open than its rivals.

This goes a long way to explaining the new spirit of co-operation among the groups vying for leadership in the Unix "war". The industry has polarised around two groups. One, the Open Software Foundation (OSF) including IBM, Hewlett-Packard and Groupe Bull has developed what it calls a distributed computing environment (DCE).

Unix International (UI), with more than 140 supporting companies including AT&T and Sun, is committed to a version of Unix called System V Release 4 (SV4).

A few weeks ago, it announced a scheme which it calls UI Atlas. It has three telling points. First, the so-called Unix wars have hurt Unix and the open systems movement by spreading confusion among customers. Therefore, it proposes compatibility between SV4 and the OSF's DCE.

Second, Unix needs to improve security, throughput and its ability to handle live transactions before it can compete fully with proprietary systems.

Third and most important, suppliers can get limited value from slavish adherence to open standards. There must be latitude to differentiate themselves one from another if anybody is to make money in the open systems marketplace.

The UI Atlas scheme may seem a small development in a world full of warring factions - the ACE consortium including Compaq and the Santa Cruz Operation and the new alliance between IBM and Apple are just two examples.

But it does suggest there is light at the end of the Open tunnel both for suppliers and their customers.

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## NETWORKING AND OPEN SYSTEMS 2

Progress is at last being made on getting computers to communicate, reports **George Black**

## Popular wave for computing's 'Esperanto'

## OPEN

Systems Interconnection, the International Standards Organisation proposed method of getting all makes of computers to communicate, is regarded by cynics as the industry's Esperanto.

They say the idea of a universal language is just a pipe dream. But there have been signs recently that they could eventually be proved wrong.

OSI has been built on a seven-layer model of the data communications world, ratified in 1983 and developed within the committees of the ISO. Experts comment that there are few areas of the model which are still completely blank.

Yankee Group Europe surveyed the European market last year and concluded that there was still a vicious circle created by users waiting for products and suppliers waiting for demand. But nearly half of the largest users had embarked on OSI implementation. Three-quarters of those in the public sector had done so, but in the private sector the trend was a lot more sluggish. Banking and finance firms were the keenest.

Mr Nick Bush, a senior consultant at Butler Cox, likewise sees indications of that vicious circle beginning to be broken. "IBM and Digital now support many of the major OSI standards. The picture is not so

bleak as some have been painting it," he maintains.

Europe was the leader in OSI in the 1980s, with leading manufacturers such as ICL and Bull backing the movement. The European Commission's European Procurement Handbook for Open System (Ephos), one of the prescribed books for prospective suppliers and users, is OSI-based.

OSI is being driven to a great extent by governments. Gossip (the government OSI profile), a simplified version introduced in 1988 by the UK government's central computer and telecommunications agency (CCTA), has been adopted by European governments and become a catalyst for OSI.

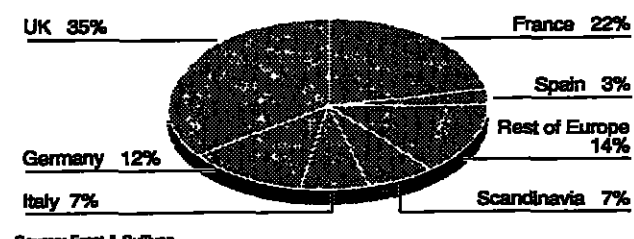
It lays down the open systems conditions which must be met by bidders for public sector contracts. OSI's promoters think that Gossip will soon be endorsed by private companies, too.

The US government adopted Gossip last year, with minor amendments. But in the US there is still much less interest in OSI than in Europe.

In the UK open systems have been popularised since the mid-1980s by the Department of Trade and Industry. This had a beneficial effect in stimulating the market, but also raised expectations before many OSI

## OSI market in Europe - 1989

Total market: \$98.1 million



Source: Frost &amp; Sullivan

options were available. There was an over-reaction of scepticism which needs to be overcome.

Three OSI demonstrator projects are run by the department at Northampton Health Authority, Aston University and the Automobile Association (the AA). These have had a mixed reception, an official said: those who have seen them have generally concluded that the concept was right but the cost of new equipment, planning, implementation and training was still too high.

The advance of OSI has been delayed by the growing popularity of an easier, ad hoc solution known as TCP/IP (Transmission Control Protocol/Internet Protocol). This is the US Department of Defense's standard for communications

between machines based on Unix open operating systems.

Many users setting up Unix networks have preferred TCP/IP to OSI, though often seeing it as only a temporary solution on the way to OSI.

The DTI still believes that OSI will be the eventual winner, though it concedes the evolution is taking longer than it expected. In the short term, it says, pragmatic solutions such as TCP/IP may be needed, but in the long term OSI should prove more robust and have fuller functionality.

An OSI products guide, published by Technology Appraisals with research funded by the DTI, goes into its second edition shortly; it lists hundreds of products from around 80 suppliers.

The first edition did not sell

as well as hoped; an official said prospective OSI users were still being very cautious. But he thought the barrier was now mainly psychological.

The DTI is to publish an OSI migration guide to complement the products guide. Some top vendors are likely to bring out their own literature to encourage users to make the move.

Each of the three big trading blocks - the US, Europe and the Pacific Basin - now has its own forum or workshop for determining how OSI standards can be implemented and reflecting the content of Gossip.

To the outsider, the world of OSI seems to have so many administrative and advisory bodies that the mechanism appears absurdly complicated and more likely to hinder than help the diplomatic process. Insiders argue that the nature of the subject is just so complicated that this is the only way it can be done.

Progress is being held up by a lack of flesh on some of the bones of the ISO model. This is especially true at the higher levels, affecting the user's applications, such as transaction processing and network management.

Transaction processing has had to wait while other applications such as file transfer and electronic mail, seen as

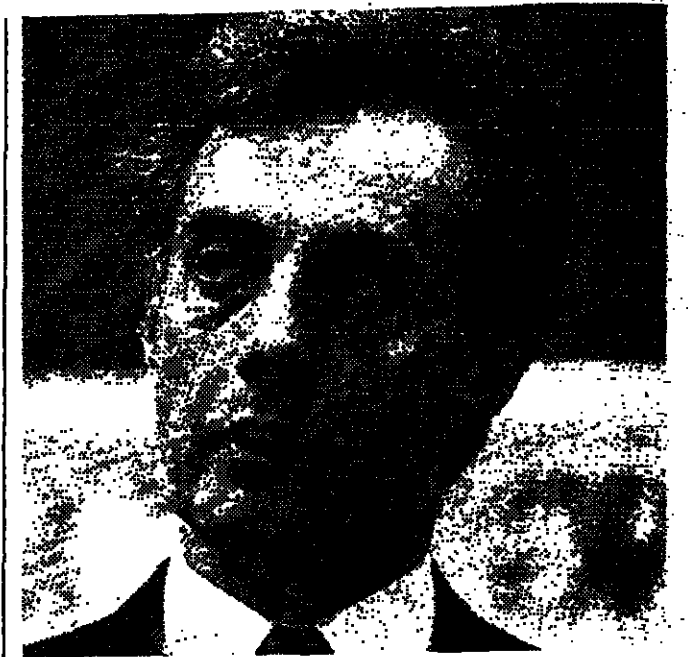
more urgent by users, were being addressed.

The rapid spread of Unix-based systems in the past few years has turned OSI-based transaction processing into one of the users' priorities. The vendors are now scrambling to make such systems work.

As a result of the remaining inadequacies of the OSI model, acceptance of its standards is patchy. X.25 is a well-established OSI standard for packet-switched networks. FTAM (File Transfer Access Mode) has been popular in Europe as a standard for file transfer.

But although users say they want OSI-based electronic mail and network management, they have been slow to take up the options, X.400 and X.500. Nor has Map/Top, the Manufacturing Automation Protocol/Technical and Office Protocol, advanced as quickly as its advocates supposed it would.

OSI products vendors are having to be patient and find other sources of income while the market emerges. Dowry Communications has been marketing a range of OSI hardware and software products for around four years now. Mr Chris Anderton, its marketing manager, says that up to now there has been more interest in its TCP/IP range than in OSI.



Mr Geoffrey Morris, president and chief executive of X/Open, a consortium of computer suppliers and customers which aims to create a common applications environment (CAE) based on the most useful formal and de facto standards. "Tomorrow has got to be the age of the answer," he says.

## Systems Network Architecture

## Pressure on IBM grows

WHEN IBM moved its networking systems headquarters from the US to the UK this year, it recognised the paramount importance of the issue to its biggest European customers.

Networking is at the top of their agenda, as the single European market approaches and the eastern half of the continent becomes accessible. About 40,000 of IBM's users worldwide rely on Systems Network Architecture (SNA), its proprietary method of connecting computers.

SNA was introduced in 1974, originally to handle the need for a single terminal to address several applications. Before long, standardisation was being demanded as users wanted to link equipment from various vendors.

In 1982 IBM began to respond by opening up SNA. In 1986, when it launched Open Communications Architecture and published details of the SNA interfaces, IBM allowed other manufacturers to connect to its machines.

The primary need among the largest IBM users at that time was to be able to manage

Rome OSI laboratories.

IBM has substantially increased its investment in OSI since 1988, when it announced its OSI Communications subsystem to let its users communicate with non-IBM machines through OSI protocols. But Mr Anderson believes that SNA, OSI and TCP/IP will coexist for the foreseeable future.

At present, SNA is the best choice for the mission-critical applications of major users, with the richest set of software to support it, he says. Many of the world's largest organisations - banks, manufacturers, public bodies - would grind to a halt if their SNA system failed.

In the US, SNA certainly still enjoys users' confidence, partly because of greater loyalty to IBM than exists in Europe and partly because of fundamental differences in the markets.

Some users, however, mainly in Europe, have been pressing IBM to move faster towards OSI. These users typically want less focus on the IBM mainframe and want to adopt some OSI standards, such as X.25 for connecting equipment to packet-switched data networks.

IBM has sought to reassure this pressure group. Last year it made a strong endorsement of the Gossip (Government OSI Profile) protocols which are essential to bidders for public sector contracts.

In September it made a set of announcements of products and intentions for networks, including clarification of its Systems Application Architecture (SAA) framework and within SAA its System-View strategy covering SNA and OSI.

The announcements focused on its NetView product, which enables users to view and control their multi-vendor networks from a single workstation. In promoting NetView, IBM is playing to its SNA strengths, as users generally see SNA as much superior to OSI in network management.

Mr Dave O'Brien, UK managing director of Cande, a software house which is a member of IBM's new System-

## IBM has invested in OSI. But it regards SNA, still dominant in the IBM user community, as the networking standard

communications between IBM mainframes and Digital VAX minicomputers. IBM had to acknowledge the permanent place of Digital in the industry.

The changing balance of power was shown by its establishment of a Multivendor Coexistence Centre in Dallas, Texas, and a similar one in France, aimed at coping with the practical problems of interconnection with VAXes and other equipment.

From the mid-1980s, information technology directors began to want a language which would be common to all makes of computer; that language was intended to be Open Systems Interconnection (OSI), the standard being developed by the International Standards Organisation.

IBM therefore invested in OSI in parallel with SNA. But it still regards SNA as the *de facto* networking standard. SNA remains dominant in the IBM user community, where OSI has so far gained only around 100 users.

The reason for this, according to Mr Bob Anderson, manager of marketing communications for IBM Networking Systems, is simply that developing OSI was a lot harder than anyone anticipated.

"It probably should not surprise us that OSI has taken so long," he says. "It is not like an electric plug. There are so many difficulties to be overcome to get two systems to connect properly."

Mr Anderson argues that users today still see SNA and the US Defense Department's TCP/IP (Transmission Control Protocol/Internet Protocol) as immediately practical solutions, whereas they see OSI as their hope for the future. Asked to predict the future take-up of OSI, he says: "Everyone, everywhere - some day."

Many commentators believe that IBM is deeply negative about OSI, as well as about open operating systems based on Unix software, because its profits rely so heavily on proprietary systems.

Though IBM is well represented on open systems standards bodies, its role is that of observer rather than supporter, critics claim.

But Mr Anderson insists that while OSI is still immature IBM has no choice but to continue to give priority to SNA. So IBM's Raleigh, North Carolina, SNA research and development operation is still funded more highly than its

## In promoting NetView, IBM is playing to its SNA strengths, as users see it as superior to OSI in network management

View International Alliance, says that all the vendors have underestimated the effort needed to make OSI work.

In setting up the alliance, IBM was acknowledging that it needed help on both SNA and OSI, he adds. IBM will work through "design councils", an inner circle of systems software specialists, to try to sort out the troubles of multi-vendor sites.

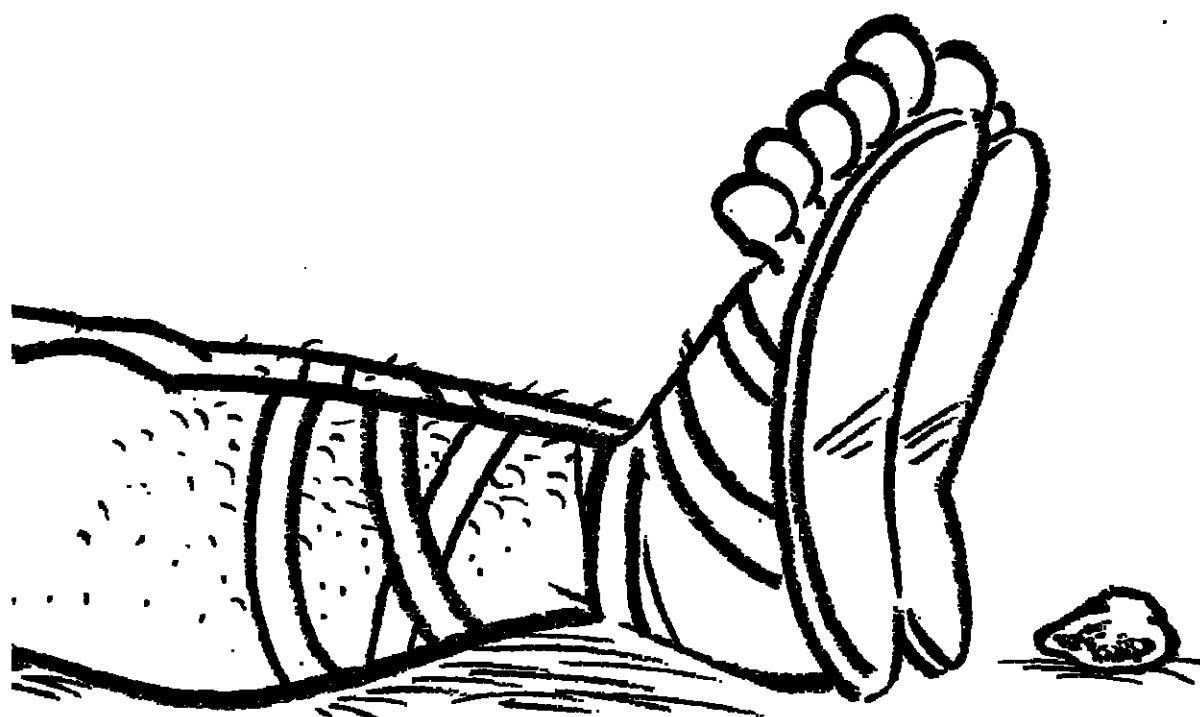
Mr David Williamson, managing director of IMI Computing, which serves many IBM users, says that IBM is coming under increasing pressure to move faster towards OSI, especially as a result of the growing success of its Unix-based RS/6000 mid-range machines.

SNA stood in the way of users wanting to achieve hardware independence, he said, but IBM was listening to its customers and had now recognised the strength of feeling for open systems.

SNA will continue to have a wider range of supporting products than OSI for a number of years. That can change when IBM wants it to. SNA's share of the networks market will probably fall slowly through the 1990s, as OSI matures and as users downgrade to smaller machines.

Nevertheless, any thoughts of its demise "are certainly premature," says Mr Williamson.

George Black



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## NETWORKING AND OPEN SYSTEMS 3

'Proprietary systems are not a scenario for survival any more'

## Digital opens up its Decnet network

DIGITAL promised to move its Decnet proprietary network to an open systems environment about two years ago and finally delivered the goods this summer.

Mr Keith Baker, the company's open networks marketing manager, admits it is around a year later than had been hoped, but says it was thought more important to ensure that the product did everything required than to meet a target date for completion.

Decnet now supports both the International Standards Organisation's Open Systems Interconnection (OSI) and the US Department of Defense's TCP/IP (Transmission Control Protocol/Internet Protocol).

The scope of the system has helped to dispel some of the cynicism that tends to accumulate in the computer industry

### The market grew so fast that it became hard for even the leaders to keep up

whenever announced products do not materialise on time.

Digital Networking Architecture, as Decnet was originally called, is now installed in an estimated 100,000 sites worldwide, amounting to some 4.5m end-users.

It began life in 1975 - soon after IBM's System/360 Architecture (SNA) - in similarly humble circumstances. Having first been developed by the company for its own use to link its PDP-11 minicomputers

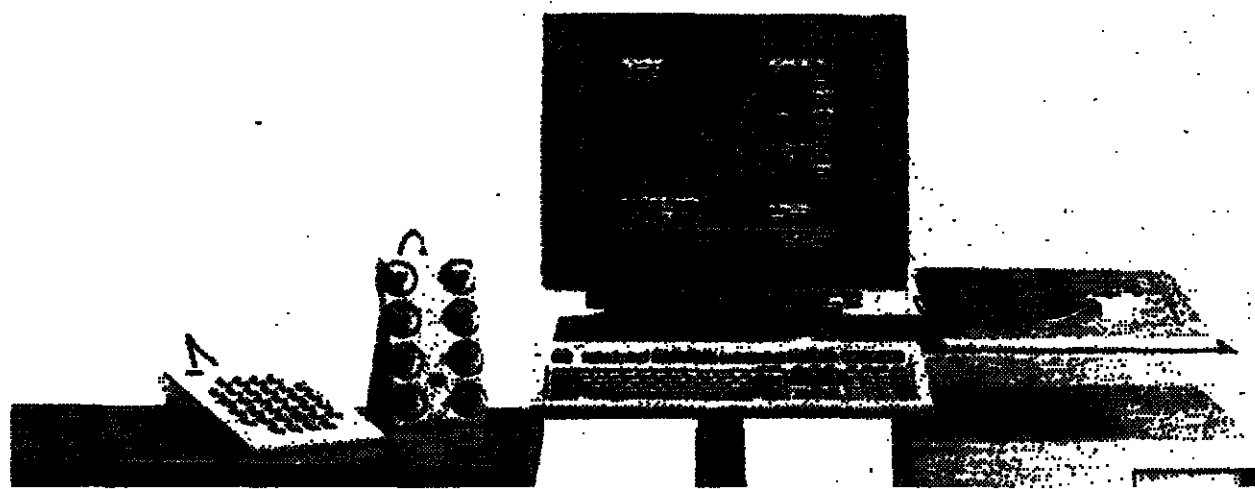
and other proprietary equipment, the Decnet Phase I product was unsophisticated, handling only file transfers within small networks.

The 1978, Phase II version replaced file copying by remote access to files and a basic form of network management. By 1980, when Phase III was introduced, local area networking had been expanded to wide area networking with communications across the public phone system.

As users began to look for communications between various makes of machine, Digital responded in 1982 with a Phase IV Decnet, incorporating Xerox's Ethernet standards and limited compatibility with IBM's SNA.

Between Decnet Phases IV and V there was a much longer gap, eventually amounting to nine years. This was mainly because the market grew so fast and became so complicated by the number of new vendors, products and standards that it became hard for even the leaders to keep up with all the changes.

This complexity drove Digital to develop a new system, towards OSI. In 1989 it announced a programme for achieving full OSI compliance, hoping to carry it out in six to nine months.



The IBM Risc System/6000 Powerstation 730 demonstrating Callia

"Standards hit up against the real world," says Mr Baker.

In particular, the design of the new system had to be changed to take account of the unexpectedly rising demand for TCP/IP.

As late as 1989, Digital was still doubtful about the future of Unix and believed that its appeal might be limited to certain sectors such as universities. Its support for TCP/IP, which serves Unix users, was therefore correspondingly

restricted.

When Digital became aware that the Unix handwagon was at last rolling, major changes to Decnet Phase V became necessary.

Whereas Unix has become universally accepted in the past couple of years, the same is not true of OSI, Mr Baker notes. The take-up of OSI has been slower than was foreseen both because vendors have had trouble in creating the products and because users have

found the transition harder to undertake than they anticipated.

"They recognise that they must move to OSI, but the problem is how," says Mr Baker.

Meanwhile, Decnet has now reached almost its ultimate stage of development, in his view. "The kitbag of standards is now almost full, unless this is invalidated by some completely new technology," he says.

Opinion is still divided on how wholehearted Digital's conversion to open systems is. Many in the industry believe it is more willing than IBM to drop its proprietary products in favour of those open ones now wanted by a fast-growing number of users.

On the surface, its switch from a proprietary to an OSI-compliant Decnet, as from proprietary operating systems to accommodating Unix, indicates a desire to move as rapidly as

possible to the brave new open world.

This would imply a recognition that Decnet, despite its huge user base, was not a strong enough *de facto* standard to withstand the stampede to open systems; but that, hitherto to OSI, it could become a force comparable to IBM's SNA.

There is certainly evidence to justify this interpretation. Digital has some 200 software houses helping with its Network Application Support (NAS), its equivalent of IBM's Systems Application Architecture (SAA) framework. Many of these are said to be engaged on OSI work.

The company has been proactive in developing the layers of the model where needed, for instance contributing to X.500, the network management standard which is generally thought a weak spot in OSI.

It has also joined the Office Document Architecture (ODA) consortium, which is trying to develop the OSI standard for document exchange between different systems.

However, Ms Audrey Mandela, research director of consultancy Yankee Group Europe, suggests that although Digital's direction is clear, its speed of movement may not be as

fast as users want. It could be delayed until full value has been extracted from some of its proprietary products, she thinks.

Software houses report a favourable reaction to Decnet Phase V. Mr Neil Proctor, a sales support manager at Hoskyns, says that users now feel Digital is committed to open systems, even though it may take time to turn its organisation around.

Mr Phil Brobyn, a technical consultant at Fraser Williams, says the enhancements will be welcomed, though at present users are asking for the TCP/IP features more than those for OSI.

The important question for Digital now is whether its users will balk at the time and cost needed to take up OSI.

This year the company began a project for licensing

### The question is: will users balk at the time and cost needed to take up OSI?

Decnet. Potential clients are either Unix or proprietary systems vendors seeking to help their clients connect to Digital equipment, among the first licensees to be announced is Olivetti.

Digital's Mr Baker believes there will be considerable interest in acquiring such licences "because proprietary systems are not a scenario for survival any more."

George Black

## THE US INITIATIVE

## Protocol that should survive

TRANSMITTING DATA from computer to computer requires agreed standards, referred to in the communications world as protocols. Communications protocols lurk in the depths of computer hardware, and by their very nature the end-user should not need to address them directly.

To tackle the order of battle in the protocol war, you must first brace yourself for a barrage of initials. But it does help to understand that protocols are governed by the same rules as the rest of the IT industry: namely, that scientific measurements are hard or impossible to come by, and behind every technical observation lurks a good old-fashioned personal opinion.

In 1978 the US Defense Advanced Research Projects Agency (Darpa) launched a plan to beef up computer links between research establishments and universities across the US. Darpa enjoys a mixed reputation among the US scientific community. Riding high on the defence spending boom of the 1980s it dedicated millions of dollars to the Darpa-car, a six-legged anthropomorphic jeep of latticed steel that jogged around the Darpa parking lot to no great end and broke down frequently.

With computer communications Darpa was on firmer ground. It had already established the Internet computer network in the mid-1970s. Pentagon funding and a heavy political hand across US technology R&D ensured that Darpa's vision of communications protocols prevailed. By 1983 the vast US academic computing community had adopted Darpa's Transport Control Protocol/Internet Protocol (TCP/IP) wholesale.

Darpa sponsorship accelerated TCP/IP through the standards bureaucracy. This formidable backing enabled the TCP/IP community to arrive at a definite version. Settling in on US campus, TCP/IP became inextricably with the Unix operating system. As Unix shed its laboratory coat image and entered the commercial arena, TCP/IP arrived in its wake.

Manufacturers Unisys and Hewlett-Packard wrote TCP/IP links into their hardware and software offerings. And with a huge worldwide user base the protocol acquired a loyal following. These standard bearers can be relied upon to rally around TCP/IP whenever Open Systems Interconnection (OSI), the EC-endorsed international protocol, rears its head.

"TCP/IP is efficient and pervasive and most vendors support it. Anybody who uses OSI today is really only doing so because of government constraints. OSI itself is staggeringly complex," says Mr Cliff Wilson, a telecoms executive at management consultants KPMG. Its internal network employs TCP/IP to keep Macintosh and IBM PCs and Digital Equipment and Prime minicomputers in constant communication. He says that TCP/IP is cheaper than OSI by a factor of three to one.

It is a good, straightforward common denominator between disparate computer systems according to Mr Wilson. Unfortunately, this is exactly what people say about OSI. Mr Dermot Dwyer, of the National Computing Centre's open systems group, talks of horses for courses. "What makes TCP/IP worthwhile is what runs

over it. The Simple Mail Transport Protocol (SMTP) is a perfectly good electronic mail system for a Unix environment.

Mr Dwyer does not accept that all TCP/IP based systems are instantly compatible. He thinks that political support should make OSI's triumph inevitable. The government's Central Computing and Telecommunications Authority (CCTA) has just issued a four-stage guide for public sector computer sites shifting from TCP/IP to OSI. The migration is intended to be a painless exercise that installs full OSI compliance by 1993.

The two cost centres for transition are the purchase of OSI communications software (not too steep) and the inevitable consultants' fees (systems consultants will make a tidy sum).

The CCTA can exert pressure on public sector computing. But there is no pressing influence on commercial users. TCP/IP does not demand rare and expensive skills as its academic foundation guarantees a regular supply of experienced graduates. Sun Microsystems has enjoyed phenomenal worldwide sales with its range of Unix workstations. Local networks of Sun machines are governed by the Network File System (NFS). This is a piece of software sold by Sun but written around TCP/IP. Sun users are not about to convert to OSI en masse.

"There is a lot of interest in OSI, but they're not rushing out to buy it," says Mr Jonathan Mills, Sun's UK desktop product marketing manager. "TCP does all the work they need doing at the moment."

Mr Mark Hollister, network marketing manager for Hewlett-Packard in the UK, says his company has long had an association with TCP/IP because "it is practical and a relatively simple way of controlling and monitoring information from different devices." These benefits may come to be appreciated by beleaguered motorists on the M25. As part of a 555m Department of Transport scheme to provide more information on traffic conditions, police control offices for the motorway are being linked to electronic road signs via a Hewlett-Packard computer network. Two lines of text will be flashed up on digital displays, giving data on alternative "A" road routes for drivers facing queues. After all the official backing for OSI, this high-profile state sector project is relying on TCP/IP signalling.

Mr Paul Negus, a DoT consultant from systems house IPL, explains that by choosing TCP/IP the DoT kept its future options open. "It's a protocol for any machine on the market." The DoT is not bound to stay with Hewlett-Packard, and this flexibility is what the open systems debate is all about.

If government standards cannot override the technical judgment of the DoT, then TCP/IP is guaranteed a long lease of life. The list of OSI programmes and tools will grow, rendering that protocol attractive. Bridges between OSI and TCP/IP will develop. Depending on your allegiances, this entails OSI either embracing or absorbing TCP/IP. The experience of hardware suppliers and the loyalty of its fans suggests that the protocol from Darpa will be around for a long time to come.

Michael Dempsey

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## NETWORKING AND OPEN SYSTEMS 4

Louise Kehoe looks at software standards

## Truce to boost sales ends Unix wars

THREE years after the industry erupted in battles over software standards for open systems, computer makers remain deeply divided, but hostilities have been suspended. Rival groups supporting alternative versions of the Unix operating system are stressing the similarity of their efforts, rather than squabbling over differences.

Slowing sales growth in most markets has forced computer manufacturers to refocus their energies on efforts to boost sales. In the process, the industry has recognised that users are tired of the industry infighting, which has created widespread confusion rather than making it easier to hook different types of computers together.

"There is no question that perceived or real problems over different approaches to open systems have stalled sales," acknowledges Mr Peter Cunningham, president and chief executive of Unix International, an industry standards group formed three years ago by AT&T and Sun Microsystems which now has 245 members.

The key word now is "harmonisation", Mr Cunningham maintains. The unification of multiple conflicting approaches to open systems is

essential if the open systems movement is to continue its momentum, and "take out" proprietary systems, he says.

It appears highly unlikely, however, that computer makers will ever settle on a single standard version of Unix, the AT&T operating system that has been at the centre of the industry squabbles.

Unix International has endorsed AT&T's latest version of Unix, called Unix System V Release 4, while the rival Open Software Foundation, the founder members of which include International Business Machines, Digital Equipment and Hewlett-Packard, last year launched its own version of Unix, called OSF/1.

In spite of this schism, significant progress is being made toward creating standards that will enable different types of computers to work together efficiently and share applications software. In a landmark event for the open systems movement, OSF recently announced availability of its

Distributed Computing Environment, a new layer of system software that enables different types of computers running different operating systems, including proprietary software, to inter-operate.

"DCE will preserve existing investments in computer hardware, software and networks, and make future product and technology purchases more valuable," says Mr David Tory, OSF president and chief executive.

DCE is a layer of software that resides between a computer's operating system and the application program. It is not dependent on any one operating system, and enables applications to be segmented and run on whichever part of the networked system is best suited to the task.

In a significant step toward creating true industry-wide standards, OSF has agreed to license its DCE to Unix International.

DCE has also received the endorsements of big computer

users including the European Commission and Japan's Nippon Telegraph and Telephone. "DCE is the common technology denominator between industry standards groups," says Mr Tory of OSF.

Unix International is also moving forward. Recently the group announced plans to develop a framework of specifications on top of Unix if open systems were to continue to grow and knock out proprietary systems," explains Mr Peter Cunningham, of Unix International. By defining "reference technologies" and developing standard interfaces to link them, UI will specify how a broad range of computer products can be incorporated into an open system environment.

Addressing a fundamental concern among computer manufacturers, UI plans to define interface specifications that give competing companies scope to design their own implementations of open systems, and differentiate them from those of competitors in the open systems market, thus avoiding the "commoditisation" of their products. By outlining its plans, UI is also attempting to resolve some of the disputes over competing "standards" that have split the computer industry into duelling factions over the past three years.

The industry group has endorsed a set of "reference technologies" that will form the basis of its UI Atlas framework. These will become available over the next two to three years and will include technologies developed by several UI members and non-members that cover all aspects of interoperability and application portability.

In a shift of emphasis that resolves one of the wide differences of opinion over open systems, UI has also acknowledged that existing proprietary system software technologies must be integrated with open systems to protect the value of the vast installed base of proprietary systems.

For all of the excitement generated by open systems, computers running variants of the Unix operating system still account for only about 15 per cent of the world computer market.

Momentum behind the trend toward open systems is, however, growing. IBM, long viewed as the fortress of proprietary systems, recently announced plans to offer AIX, an OSF compliant version of Unix, on its largest mainframe computers. The industry giant has declared its intention to become a "leader in open systems".

Other converts to open systems include Digital Equipment, which is placing increased emphasis on software standards; and Unisys, which bases its product strategy on the open concept.

Hewlett-Packard has made a broad commitment to Unix and open systems, while Data General has created a line of open systems products with which it aims to restore itself to financial health.

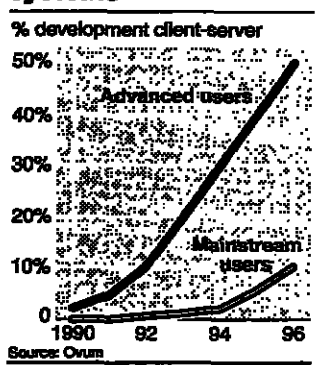
NCR, recently acquired by AT&T, is also a leading open systems advocate along with Sun Microsystems, the workstation market leader. Even Apple Computer, a company built on the superiority of its proprietary systems, has bowed to the inevitable. Through its recently signed agreements with IBM, Apple will adopt a version of Unix and attempt to transform its popular graphical user interface into an industry standard by licensing it to other computer makers.

Indeed, the computer company that lacks an open systems strategy is today the exception, rather than the rule. "The Unix wars" may be over, but new standards battles will inevitably arise as more companies crowd into the open systems arena and struggle to find the best solutions to the complex problems of making networks of heterogeneous computers behave like homogeneous systems.

## CLIENT-SERVER COMPUTING

## The promise of paradise

Uptake of client-server systems



End-user fourth generation languages (4GLs) on mainframes helped to reduce the programming backlog, and they eased the delivery of applications to impatient end-users. But 4GLs remained largely the province of computer programmers, and were

found by many end-users to be too unwieldy, too unsympathetic to novices, often requiring extensive training and familiarisation.

On the other hand, they kept the user within the corporate fold: the data that users handled was up-to-date, valid and strictly controlled by the data processing department in its role as guardian of the corporate information store.

The PC offered independence to such users at what seemed a low price. Spreadsheet tools such as Lotus 1-2-3 offered ease of use, accessibility and a highly personal base of data. Specific PC database tools, such as dBase, Foxpro, Clipper, and others took the principle further.

Users were able to build up a highly personal collection of data, some of it copied and augmented from corporate records held elsewhere. The PC or workstation has a user-

friendly face, often with "windows" and simple graphics tools.

But there are disadvantages in PCs which the client-server approach could overcome. Mr Robin Bloor, of consultancy Butler Bloor, sees the PC as a personal tool with not enough processing power to cope with all the demands made upon it.

"The PC starts as an enabler, then becomes a constraint, the main problem being one of fragmentation," he says. "But soon people will start producing tools to manage software for the whole network, so that they can build corporate bridges. Only then will it be possible to build your applications on a PC without sacrificing performance."

The evolution of GUIS - Graphical User Interfaces - brings another vital element to the appeal of the client-server solution, since GUIS provide a very friendly environment, and

a "gateway" to other processes. GUIS are part of the movement towards a more liberal environment one demanded by users.

"We've trained something in the region of 3,500 people this year, about 1,500 of them on PC databases, using various PC hosts," says Mr Brian Webb, business development manager of Surrey-based training specialist Compex.

**The catch is that little has been written with client-server architecture in mind**

"We've detected a shift to the windows-based graphical representation of data. The interface must be intuitive, self-explanatory from the moment the user switches on: that is all part of the 'power to the people' movement, towards seeing all data as a corporate

resource."

Client-server computing proposes a solution so simple that one is tempted to ask why it has not happened before, and just what is the catch? Ideally, the client-server hangs all computing resources together in a network which embraces PCs, mainframes and other resources.

The processing tasks are parcelled out as and where appropriate, taking place locally on the desktop "client", or centrally on the "server". Servers can be dedicated PCs, minicomputers or mainframes. The allocation of tasks takes place invisibly to the user, who sees only the face of the "client" application, almost always a GUI.

The catch is that little software has been written with client-server architecture in mind. PC database suppliers are among the first to take advantage of SQL, the  *lingua franca*  of database, to link their PC tools to their big brothers on the mainframe such as IBM's DB2. Little other applications software exists.

Mr Frank Dodge is the founder and former president of mainframe accounting software vendor McCormack and Dodge, (now Dun & Bradstreet Software). His newly formed Dodge Group intends to provide accounting applications on what he calls co-operative processing environment. "The term client-server has been abused, and is getting muddled like other software terms. We are light years away from the ideal model as yet, and to implement it, software has to be totally redesigned and redeveloped from scratch. You cannot get the benefits of client-server merely by putting a graphical user interface in front of old technology that stays on the mainframe."

Users, he says, need to devote as much control from the mainframe as possible - applications and databases ought to be delivered to the network on a server. But this means writing extra controls and messaging into the applications. Mr Dodge warns that this will delay the promised land of client-server.

"All of the current software companies and hardware companies like IBM and DEC have vested interests in keeping the software on the mainframe where possible," he says.

Claire Gooding

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Geoff Wheelwright looks at the attractions of local area networks

## A trend to attachment

THE STATISTICS are pretty unimpressive. More than half the world's PCs are already connected to local area networks (LANs) and industry predicts that by 1995 there will be more business PCs attached to LANs than there were total business PCs two years ago.

So what is the attraction? Why would any group of level-headed PC users willingly surrender their autonomy and network their PCs? The answer is simple. It is the prospect of a more powerful, more efficient, more reliable system. It is the prospect of a more powerful, more efficient, more reliable system.

plotter is required for work instead of several expensive devices, the network links everyone in the office to the printer, and automatically queues requests when more than one person wishes to use the printer at the same time.

Applications sharing. If you work in an office where several people work with the same application using the same basic structures, set-up files and commands, training becomes easier and general productivity is more effective.

It is difficult to justify the installation of a network to link three standard AT-compatible systems in a small office.

But if you link them to a file server which offers everyone his own hard disk capacity and provides them with the benefits of using new "workgroup applications", then it just might be worth the investment.

whether or not they need a network is defined by how many machines they have, not by the job they expect those machines to do.

Having decided that you need a network, the next step is to consider the key issues in evaluating what is available. The first - and most important issue - is your long-term plans about what you want the

The real fun begins when you decide that you want your applications to be "network aware" and to offer you some of the benefits of true, higher-level PC networking. This means having file and record locking on your databases so that when you are updating record 1234 on a database file, no one else can get in to work on that same record in that file.

The minimum number of PCs needed to make a network worthwhile depends on both the applications you are lacking now and those you plan to handle in the future.

For example, you merely need a short-term solution to sharing files between some low-powered PCs around a small office - and you plan to upgrade the PCs in the near future anyway - you can be flexible in what you buy. There are literally dozens of non-standard, low-cost networks - many of which do not even require special network adapter cards - that will allow you to connect up these modest machines and share files, and sometimes even printers, between them.

At the same time, allowing network users of word-processors to carry out "revision marking" (where other members of your workgroup can go around an electronic copy of something you have written for them and mark up their corrections without making them permanent) and implementing office-wide electronic mail systems.

To do all this you will need a network which conforms to certain industry standards. There are three to worry about: cabling, network adapter cards and network operating system software.

Cabling is probably the simplest of choices - it is usually dictated by the adaptor card you use. Among the more popular cabling choices are Ethernet, Token Ring, and ARCNET. PhoneNet, using ISDN telephone cabling, and IBM Token Ring. As for the adaptor cards, they also come in a variety of flavours - including Token Ring, AppleTalk, and allow PC users to connect into Apple Macintosh networks, IBM PCN and lots of others. In addition, a growing number of PCs - such as Apple's Q-Link - come with network adapters built onto the motherboard of the machine.

With most low-cost networks, however, the whole thing comes as part of a single package - containing cabling, network adapter card and network operating system software. Some of the more popular packages are Novell NetWare 2.11, Microsoft Windows 3.0 (and updates are on the way for both Mac System 7 and Windows 3.1), and Apple's Macintosh Plus. Novell NetWare 2.11, however, is a bit of a slightly different colour. It is designed for more powerful PCs and is a good

Local area networks: how the business is developing

## The 'no-brainer' choice

The local area network (LAN) business is growing much more quickly than the PC industry as a whole and everyone - from software houses to PC hardware producers - is busy trying to hop on the LAN bandwagon.

The arrival of effective PC networking standards a couple of years ago initially provided much of the fuel for this growth. More than 60 per cent of the networked market has now standardised on Novell NetWare. And that market share is growing - as the choice of a basic PC network is what US developers call a "no-brainer" decision.

Because Novell offers support for all manner of network configurations, there are few variables in this buying decision to overtake the little grey cells of network administrators.

Novell itself is trying to make the decision even easier by moving into the traditional minicomputer market with support for a number of mini-

computer systems. Mr Darryl Miller, its vice-president, says Novell expects great things of Unix over the next few years.

"We felt there needed to be a greater purity in the Unix environment, so that was one of our chief reasons for being a partner of Unix Systems Labs (with AT&T)," Mr Miller says. "We want to produce a consistent version of NetWare that is open and supportable so we can move that into a Unix environment."

Through Novell is dominant in the market, it has not yet forced its competitors to roll over and die - there is still a choice for those who seek it out. To start with, whatever you may hear about Microsoft's current attitude to DOS/2 and LAN Manager, the fact of the matter is that Microsoft is fighting tooth and nail to keep its foothold in the PC network operating system market.

In fact, only last year Microsoft announced a new version of its LAN Manager 2.0 network software. Now, new versions of LAN Manager will be designed to fit in with Microsoft's Windows NT (New Technology) strategy. This permits Microsoft to offer an environment that runs on anything from laptops and entry-level

of network personal computer applications continues apace. Lotus Development, for example, is one of the PC industry's classic success stories - rising to overnight riches with the development of its original Lotus 1-2-3 spreadsheet in 1982. Despite a huge product line and installed base of users, Lotus has recently been making a big play for the PC network software market.

Mr Jim Manz, Lotus president and chief executive officer, says that networking and "workgroup computing" (where PC users use specially-designed software to share work over a LAN) are to be major planks in the new Lotus platform - one which appears to be built from the base of the

company's Lotus Notes network communications product.

"Our strategy is to enable people to work together by connecting disparate information systems and Microsoft "should mend its differences with IBM"

environments, connecting people to the information they need, connecting products with one another and connecting people with people," he explains.

"By next year, 60 per cent of all PCs will be connected to local area networks. By 1994,

there will be more business PCs attached to LANs than there were total business PCs two years ago. Just as 1-2-3 was the defining application for personal computers in the 1980s, we believe that Notes will be the defining application for network computing in the 1990s."

While Notes may be the first true groupware product, it is for Lotus the beacon for where we are taking our products. We are well under way with a group of products that we and our customers can easily imagine group authoring or text and presentation applications."

Finally, there is one wrinkle in the whole personal computer networking business at the moment - and that lies in the role played by the computer operating system. IBM, Microsoft and Novell (through its recently-acquired Digital Research subsidiary) are fighting over who will control the base operating systems upon which PC networks are built. Although Microsoft is heavily

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## NETWORKING AND OPEN SYSTEMS 6

## Profile: HEWLETT-PACKARD

## It pays to take a Risc

FIFTY-TWO years ago, Dave Packard and Bill Hewlett formed a company in the US to manufacture a resistance-capacity audio oscillator for testing sound equipment.

Today, Hewlett-Packard heads into the 1990s as a force to be reckoned with in its specialised field as an international manufacturer of measurement and computation products and systems used in industry, business, engineering, science, medicine and education, in approximately 100 countries. It employs more than 91,000 people worldwide and had revenue of \$13.2bn in its 1990 fiscal year.

Clearly, Hewlett-Packard has enjoyed a sound business plan over the years to survive the rough and tumble of the international information technology industry. Its secret lies in its ability to foresee trends and react quickly.

It was ahead of its rivals in identifying two key trends driving the computer marketplace today. First, the move to standards-based open systems and software, where all makes of equipment work together. Second, the growth of distributed client-server computing in which desktop computers or "clients" are the window into a diverse, integrated network of general-purpose minicomputers, mainframes and specialised servers.

Hewlett-Packard believes that these trends have emerged because many organisations are suffering what it describes as an architectural crisis characterised by product proliferation, technical incompatibility and wasted data.

The company's answer to the problem is an open systems commitment in its broad range of personal computers, workstations, servers and desktop peripherals. Its early commitment to the development of reduced instruction set com-

puting (Risc) architecture, where the speed at which the processors can execute instructions is increased, enhanced its success. Hewlett-Packard spent \$1bn changing its whole system range to this technology at a time when even International Business Machines, the world's largest computer manufacturer, was avoiding Risc.

Hewlett-Packard now plays a leadership role in forging industry standards that define the interfaces between different hardware and software elements, so creating open systems. It is a committed supporter of the Open Software Foundation (OSF), an international group of companies which have merged their tech-

## The only cloud on the horizon has been its workstation business

nologies to create open systems standards for others to follow.

In 1988, the OSF adopted the graphical user interface motif which has Hewlett-Packard components and provides users with a standard way to access information. It competes against Unix International's Open Look package from Sun Microsystems.

Last year, the OSF chose Hewlett-Packard networking technologies as components of its distributed computing environment, which enables users to access company-wide information from their own desktop systems. For example, marketing managers can access information worldwide with software they buy off the shelf.

They can write a report in ink and get information from Tokyo on manufacturing production schedules and from Chicago on engineering designs. They can also assem-

ble financial results from business units in North America, Europe and the Pacific Rim. The European Commission has endorsed the distributed computing environment.

Last month, the OSF as the standard organisation selected three Hewlett-Packard products to form the core of its distributed management environment, which allows users who manage a worldwide computer network to handle problems from one location. The aim is to allow users to view on their own screen a map of the entire network of multi-vendor systems in use and so be able to take fast, appropriate action when a problem occurs.

Emphasising Hewlett-Packard's commitment to standards is its award-winning NewWave graphical software environment that makes advances in the usefulness of desktop computers. NewWave allows applications from different vendors to be tightly integrated and gives a user access to all a computer's functions from a single environment.

NewWave pioneered object-management technology and was the reason why Hewlett-Packard helped found the 70 company-strong Object Management Group. The group's mission is to help the industry create standard interfaces for software "objects" that can be used as applications "building blocks" greatly to improve software quality and productivity.

NewWave has spawned the concept of NewWave Computing, Hewlett-Packard's open systems vision for the future. The aim is to link a variety of computers in a network so they can operate as one. The approach is based on open systems and advanced software technology so that users can build on computing resources they already have.

Users are helped in their

task in being able to draw on more than 4,500 third party solution providers who round out Hewlett-Packard's own offerings. Workstation deals include Mentor Graphics at \$400m, US West at \$25m, NTT at \$38m and Nissan at \$13m.

Hewlett-Packard has also expanded its relationship with Hitachi by licensing Hitachi to make and sell microcomputers based on HP's PA-Risc architecture. And Oki Industry of Japan has teamed up with Hewlett-Packard to build jointly and operate a printed-circuit board manufacturing facility in Puerto Rico.

With the political clout of a standards organisation behind it, and midrange computing systems in good grid positions in the Unix operating system race, Hewlett-Packard looks set further to consolidate its position in the open systems markets of the future. The only cloud on the horizon has been its workstation business which, despite large orders, has not lived up to the promise shown by the company's acquisition of Apollo in 1989.

The problem lies in competition from International Business Machines and its popular RS/6000 system. The only consolation for Hewlett-Packard is that boxes from its rivals Sun and Digital Equipment are also under threat. Hewlett-Packard is reported to be hitting back at IBM by launching top-end mainframes next month, further extending its product range.

Lindsey Nicolle

## Profile: OLIVETTI

## A veteran after four years

OPEN SYSTEMS have been the main course in computer industry presentations for the last few years. Walk in on any significant manufacturer and you will find the overhead projector loaded with Venn diagrams overlapping in crucial areas of networking, database, PCs, minis and mainframes.

Of course, the customer features, but only as the lucky recipient of a vastly expensive all-singing, all-dancing system that covers his every business need. Or, rather, keeps him quiet until the supplier is ready to sell in the next box of tricks the lab has dreamed up.

Yet the crucial fact about open systems is that the computer industry has not embraced open systems because it wanted to. It was forced down this path by a user revolt against proprietary systems locking them in to one supplier. And once users gain the right to make a painless switch of hardware vendor, they will exercise that right.

Olivetti is proud of its open systems heritage. It made a commitment to open systems in 1987, and four years is a long time in the computer industry. Open Systems Architecture (OSA) is the framework for Olivetti's offering in the field. OSA embraces standard hardware in the form of Intel chip sets. The OS/2 PC operating system keeps Olivetti PCs in tune with every-one's idea of IBM compatibility while larger machines run the operating system that started the open systems bandwagon, Unix, rolling.

Olivetti has stamped its mark on OSA in the marketing of industry sector packages. Branded as application profiles, these assortments of technology have been selected to address customers' needs across industry.

Thus, a wide-ranging portfolio of office systems, includes integration of Microsoft's phenomenally successful Windows operating system. Olivetti has made substantial inroads into the banking and finance market on the back of personal banking (PB), which governs a bewildering array of products. The point is to take that confusion out of the bank's agenda. Olivetti angles for contracts that embrace the

## Pooling of talents and systems: "that's where we strike oil"

long-term management of technology.

The OSA factor means integrating products from dominant suppliers in the market. The selling proposition for Olivetti sales teams is their willingness to undertake a very detailed study of the business sector in question. Olivetti's success in winning finance sector contracts suggests that it has found a way to implement OSA as a part of the client's end product.

Barclays Bank has farmed out its branch equipment maintenance to Olivetti. The \$50m three-year contract relieves Barclays of a techni-

cal burden while Olivetti engineers oversee equipment from 270 separate suppliers. What distinguishes this deal is the absence of Olivetti systems. Barclays bought in systems expertise, not new systems.

Banks are traditionally tough customers. Olivetti won the Barclays' contract on the understanding that it could support whatever computers Barclays chose to install in its branches. The contact with day-to-day banking operations has paid off.

Portman Building Society was formed out of a merger in October 1990. Confronted with two sets of computer systems spread across 100 branches, the Portman turned to Olivetti to install an OS/2 based PB environment. Portman is spending \$2.5m with Olivetti to remain free to adopt whatever systems it wants in the future.

Just how far down the road of co-operation Olivetti has gone was seen at the Institute of Directors (IoD) last month. Management consultants KPMG brought Microsoft boss Mr Bill Gates and Dr Andy Hopper of Olivetti's Cambridge research centre together to address 50 IT heads from blue chip companies on future business computer systems.

The Cambridge lab is run jointly by Olivetti and Digital Equipment (Dec). Mr Gates unveiled the next step in the march of his Windows operating system - Windows NT Technology (NT). Windows NT will take advantage of

Advanced Risc Computer Specification (ArCs) machines to tie graphics, video images and external media like faxes together on one screen. ArCs workstations are under development by an industry consortium including Olivetti, Dec, Compaq, Microsoft and Unix experts SCO.

Mr Paolo Tosi, Olivetti's UK managing director, regards this pooling of talents as the only way to keep in tune with his customers. Olivetti is integrating systems both in the development stage, through technical collaboration with former fierce rivals, and in the commercial market through OEM contracts. "That's where we strike oil with a customer, with the ability to run a professional project, to deliver to a schedule, going live without a hitch."

Olivetti's whole-hearted commitment to open systems has proved attractive to users and a commercial success. But the second rule of open systems, the power of the customer to turn away, has also been borne out. In 1989 Olivetti won a \$10m contract to supply the Ministry of Defence with Unix systems.

When Olivetti bid for repeat business this year, it lost out to ICL. The MOD switched suppliers with the stroke of a pen and undermined the meaning of open systems. Mr Tosi acknowledges that the best environment for the customer is a persistent challenge for the systems supplier.

Michael Dempsey

## Profile: SUN MICROSYSTEMS

## An open architecture route to fame

SUN MICROSYSTEMS, the multi-national, billion-dollar US corporation, is one of the main standard bearers of open systems.

Sun (the Stanford University Network) was founded in 1982 and now commands the largest worldwide share of the computer industry's fastest-growing market segment, workstations and servers, according to market research firm International Data Corporation.

In the 1990s, it is predicted, such technology will overtake the traditional computing infrastructure of networked personal computers and proprietary, time-sharing minicomputers. Sun reckons its workstation and server philosophy is the fourth wave in the history of computing, the other three being the development of mainframes, minicomputers and personal computers. Certainly, the growing number of corporate disciples of Sun and its computing strategy adds weight to its claim.

Sun's rise to fame has been on the back of the basic belief that computer users are tired of being locked into buying expensive, proprietary computer systems from one vendor.

Such systems are traditionally incompatible with rival systems, forcing computer users to be faithful to one product range, irrespective of need, purely to protect substantial investments in information technology.

Sun set out to give users more buying power by developing a range of products based on an open architecture designed to unite all types of hardware and software. It centred its development around the Unix operating system which runs the inner workings of a computer, being the intermediary between the application software and the computer. Unix is a system that has rapidly gained worldwide acceptance as a standard for both technical and commercial

applications.

But in those early days there were several different versions of Unix, none of which was truly geared towards open systems. This limited the sales volume that Sun craved to dominate the blossoming open systems field, and so it teamed up with Unix's creator, AT&T, the telecommunications group, to develop a more open version of the operating system, Unix System V.4.

Sun quickly became the mid-range company to watch as it in effect legitimised Unix in the broader commercial marketplace.

Striding ahead of its more

## Many more licensees prefer to be anonymous

reticent and less well connected competitors, Sun sealed its long-term strategy in 1989. In that year, Sun dumped its two key microprocessor chip suppliers, Motorola and Intel, and started work on an advanced type of desktop machine built around a new, super-fast architecture called reduced instruction set computing (Risc). The Motorola and Intel chip processors (the engine of the workstation) were replaced with a chip designed by Sun and called Sparc.

The determination by Sun to achieve truly open computing, even if it meant redesigning the microchip, has laid the company open to accusations of proprietary intentions every bit as selfish as those of its contemporaries. However, Sun lost no time in marketing its Sparc Compliance Definition listing the requirements for Sparc hardware and software compatibility. Clone makers and software developers were quick to recognise the potential of Sun's open systems product strategy, and they provided the industry-wide investment and commitment that

Sun desired.

Today, Sun has collaborative technology deals on Sparc-based systems with some of the largest industrial conglomerations in the world, including Fujitsu, Amada, International Computers (ICL) and Xerox Corporation. Many more licensees prefer to remain anonymous.

Still, Sparc International, a consortium of 130 vendors using the technology, believes that we are only in the infancy of the Sun-compatible or Sparc-like industry. It estimates that the number of Sparc-based systems sold will increase from 250,000 today to over 1m in 1993.

Many software companies have jumped on Sun's Risc bandwagon and there are over 2,000 software applications - Sparware - available that operate on Sun's systems. Sun's own software subsidiary, Sunsoft, formed earlier this year, has shown them the way.

The expanding base of commercial Unix and personal productivity software has helped make Sun's hardware even more attractive to corporate purchasers. Notable orders include those from Northwest Airlines, New Zealand's Inland Revenue and Mitsubishi Bank.

Sun has complemented its Sparc microprocessor architecture and Unix operating system platform with its Open Look graphical user interface and Open Network Computing environment. Open Look allows users to work with ease across different kinds of computer equipment, including systems from organisations such as Digital Equipment Corporation, Hewlett-Packard and International Business

Machines and also allows access to a range of network resources.

Advanced networking products and services complete Sun's open systems focus.

Sun's ultimate goal is to leave its mark on the 1990s in the way that personal computers dominated the 1980s. It wants to empower workgroups with its workstations and servers in the way that personal computers empower the indi-

vidual. It is fond of boasting that while others build computers that network computers, Sun offers computers and associated products that network people.

Sun is confident of its lead over its rivals because others have to support multiple product lines, architectures and even multiple operating systems. Its single computing architecture is a simplified

Continued on Page 7

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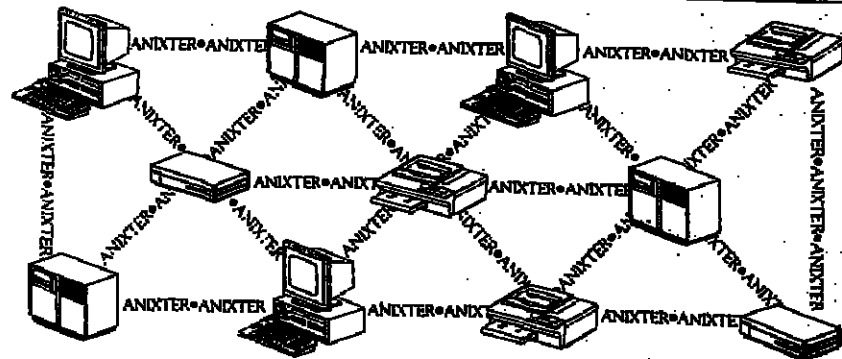
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## NETWORKING AND OPEN SYSTEMS 7

Phil Manchester looks at the prospects for object-oriented technology

## Last rites for esoteric 'priesthood'?

AT THE end of this month, what could be the last technological 'priesthood' of the computer industry will meet in London to lecture on and discuss the esoteric subject of object-oriented technology.

The seminars and the conference in object-oriented programming (Scoop) has lined up a Who's Who of the object-oriented technology world to explain what it is and to discuss its implications for the future of computer systems.

The reason that this group of worthy academics and industry researchers could be the last esoteric 'priesthood' in the computer industry is simple. One of the main aims of the object-oriented approach is to make computers more accessible to non-technologists, eliminating the need for armies of experts to operate and program them.

Object-oriented technology provides a framework for pre-defined software components or objects which can be used by end-users to build their own applications. If the protagonists of object-oriented technology are successful, it could make technology priesthoods unnecessary.

This possibility is reflected in the title of programming expert Michael Jackson's Scoop paper, 'Object Orientation: The Last One?' Mr Jackson, a pioneer of software engineering methods, discusses whether object-oriented design might be the final stage in the evolution of software development.

By defining the behaviour and the interfaces to software components, object-oriented design aims to bring an ordered, engineering approach to system development.

This should make it easier for application users to construct their own systems in a similar way to building 'Lego' models - although it is still early days for the concept and users are only just beginning to become interested.

The computer industry is, however, taking object-oriented technology very seriously. Scoop takes place against a background of furious activity by computer manufacturers and software developers to take object-oriented

## To construct one's own system should be like building a 'Lego' model

technology on board and bring its undoubted benefits to end-users.

The recent unprecedented co-operative agreement between IBM, the world's biggest computer company, and Apple, its major rival in the personal computer market, is an example. It aims to create a new breed of high-performance, object-oriented workstation by the mid 1990s.

Hewlett-Packard, the mini-computer manufacturer, has moved into the general software market with its NewWave object-oriented inter-

face for personal computers. And leading software developers Microsoft, Borland and Oracle have pledged themselves to developing their future products with the object-oriented approach.

The Object Management Group (OMG), a US-based industry group set up in April 1988 to promote object-oriented technology, has seen a massive growth in its membership in the past year. A year ago OMG claimed 60 members; now there are 170 OMG members and the number continues to rise. Microsoft and IBM, both of which had delayed membership, joined early in the year.

Significantly, large user organisations are taking notice. Mr Christopher Stone, president of OMG, says that he is currently talking to Unilever, Boeing, Dupont, John Deere and American Airlines among others. He expects them all to be signed up as members by the end of the year.

'Object orientation is now big time and the leading-edge users can start to apply pressure to their suppliers to conform to standards,' says Mr Stone. The rapid growth of OMG's membership is important because OMG fulfils the role of co-ordinator for different 'clubs' efforts to develop object-oriented technology. It has defined a framework and a set of standards which have been widely adopted.

It has also started to put flesh on the bones with products. At the end of this month, the so-called object-re-

quest broker (ORB), the central systems software component to handle communications between objects, will be unveiled at Unix Expo in the US. This will provide a base for future development of object-oriented systems.

Mr Stone emphasises the importance of the wide acceptance of object-oriented standards. 'Without consensus, it will not work. We must have agreement on how objects will talk to each other or we will lose the benefits,' he says. He has had some success in promoting compromise and co-operation between OMG members. The technology to build the ORB was derived from competing bids from

## The IBM-Apple workstation pact 'has helped us enormously'

DEC, HP and others - all of which have agreed to co-operate on a single technology.

Mr Stone also applauds the recent announcement by IBM and Apple to co-operate on its workstation development and sees it as giving credibility to the object-oriented cause. 'It is a significant risk for both companies - but it has helped us enormously.'

Mr Richard Strong, UK managing director of Next Computer - the workstation builder founded by Mr Steve Jobs, the former Apple president, also welcomes the IBM/Apple agreement. Next is one

of the few companies that has already taken on many of the radical ideas of object-oriented technology in its range of high-performance workstations. Mr Strong claims that Next is about two years ahead of IBM and Apple.

'The IBM/Apple announcement has verified the position we took three years ago and it helps a lot to have them define the market for us,' says Mr Strong. He recognises, however, that users are unlikely to be fooled by empty promises and that object-oriented technology must deliver. It must be able to offer something to users which make it worth paying the price of migration to the new technology.

'It really is a new concept in building end-user software. But we need tools to make it easier. There is a danger that object-oriented technology will raise users' expectations and then see them disappointed.'

He points to examples of desktop publishing: 'DTP caused problems because it gave anyone the power to be a designer - but you still need the design training to make it work properly.'

'The tools to exploit object-oriented technology - like our own Nextstep - are becoming available. They will cause users to start forcing the pace in about a year's time,' Mr Strong says. Meanwhile, the software priesthood will continue to push the technology as a panacea to the problems of software development - despite the long-term implications for its survival.

## GRAPHICAL USER INTERFACES

## Big stride ahead

POWERFUL modern computers offer more than faster processing and bigger storage capacity. They have also caused a revolution in the way computers are used. More and more of a computer's power is dedicated to making life easier for the user. The greatest stride forward in the last year has been the wide acceptance of graphical user interfaces (GUIs).

Pioneered by Xerox in the early 1980s and popularised by Apple with its Macintosh, the GUI has totally changed the way many use computers and helped them to gain more direct benefit from their systems. GUIs represent programs and data files on a display screen which makes them easier to understand and use. Combined with high-resolution screens and mouse pointers, GUIs have opened up new opportunities for application builders and attracted many new users to computing.

The final seal of approval in the last year has been the success of Microsoft's Windows 3 GUI for the standard IBM-compatible personal computer (PC). It stormed to the top of the best-selling software charts and Microsoft claims it has sold 3m copies in the first 18 months. For less than £100, Windows 3 transforms the IBM PC into a full-blown workstation with a multi-colour, multiple window environment comparable to, if not quite as good as, the Apple Macintosh.

Software developers have rushed to support Windows 3 and all major suppliers now

either have Windows versions on the shelves or are working fast to get them there.

The GUI has also become a major issue in the battle between the various operating environments for the mid-range computer market - with each faction presenting its particular variation on the Macintosh/Windows theme.

The result is that all mainstream software product development is now, quite rightly, focused on GUIs as the primary interface between humans and computer systems. They make computers much easier to use and the imposition of consistent standards makes new software applications easier to come to terms with.

While the appeal of the GUI is obvious in applications such as graphics design, desktop publishing and advanced word processing, its application to the more mundane tasks associated with traditional data processing, such as accountancy and manufacturing, has been slower.

But there are signs that this is changing. Database developers Oracle and Borland have shown strong commitment to GUIs for their future front-end tools developments. And leading accountancy software suppliers are also reacting to the market trend.

Sage, one of the UK's biggest accountancy software developers, has recently announced a version of its package with a GUI. And Sybiz, an Australian accountancy software supplier, has introduced an accountancy package based on Microsoft's Windows 3.

Mr John Tate, managing director of accountancy software specialists Tate-Bramall, sees this as a positive development for accountancy software users - despite doubts about the need for GUIs in accountancy systems.

'Accountancy applications are heavily keyboard based because they involve entering lots of transaction data. But GUIs are no less relevant in accountancy than in any other applications and they can bring advantages. It is certainly one of the most topical issues,' says Mr Tate.

While he sees no great advantage in GUIs for standard 'workhorse' accounting, he thinks there is potential for it

in a wider context. 'Features like cut-and-paste which GUIs offer would be useful in management information systems or for preparing a sales quote based on order information.'

'I think there will be much more to come in this area. Sage's decision to pick it up is very interesting because it is the largest seller by module in the UK.'

Accountancy is not the only established area of data processing where GUIs are having an impact. Management of large systems - particularly those based on networks - is an increasingly pressing problem for large organisations. Computer Associates (CA), the big software product supplier, sees the GUI as providing a flexible solution to systems management problems.

'GUIs are a *de facto* standard for all new product development in CA and we see it as more than making systems easier to use. Our heavy involvement with mainframe software allows that there is a strong trend away from surrounding computers with experts. Users want control and the GUI gives us a way to deliver it,' says Mr Mike Maundrell of CA in the UK.

One of CA's main markets is for operational control software which allows mainframe resources to be used in the best way. Mr Maundrell says that the company will provide a GUI extension to its system management products. Called Viewpoint, it is compatible with Windows 3 and will 'help the move away from centralised machines to network environments.'

CA, in line with most other suppliers to the PC market, is also bringing its PC products across to Windows 3. 'We have announced Superproject, this month and Supercalc will follow in the next three months,' says Mr Maundrell.

As far as extending the GUI to end-user applications is concerned, Mr Maundrell agrees with Mr Tate. 'You don't need a GUI for debits and credits, but it is very useful when you want to know something. We see it as an information delivery vehicle. If it is nice and easy to use, more people will use it.'

Phil Manchester

## Open architecture route to fame

Continued from Page 6  
technology that should enable it to retain a leading market share in the industry.

But while Sun's future looks assured - there has even been speculation that Fujitsu has an acquisitive eye on it - the company has its crosses to bear. It recently abandoned one of its US corporate marketing slogans, 'the network is the computer' and tried to ignore jokes that it did so because the phrase implies rival X-terminal technology. (X-terminals combine the

power of a workstation with the compactness of a terminal). Turning the other cheek was rather tricky for Sun as it

## X-terminal technology may have the potential to oust workstations

meant looking straight at its Mountain View neighbour, Network Computing Devices, which specialises in X-terminal technology and is reported to be trying to take out a copy-

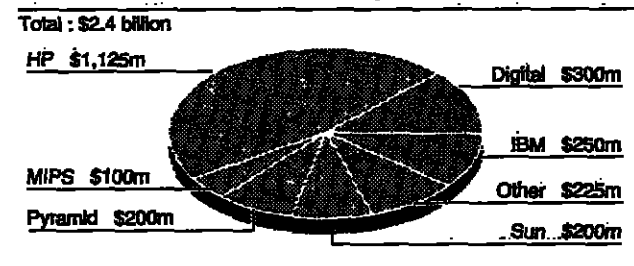
right on the phrase.

X-terminals are already beginning to compete with the workstation at the corporate level and IDC and Dataquest analysts predict that demand for them will jump from 51,000 units in 1990 to 788,000 in 1994. Sun's strengths lie in the low-end workstation market and it is here that X-terminal technology is expected to bite. Some think that X-terminals have the potential to oust workstations from corporate IT strategies within five years. But with Sun's investment in

the high-end workstation and server markets, it is unlikely to be badly mauled.

Where Sun has perceived a threat to its domination of the open systems marketplace is in the continued thrust of Intel-based machines. Accordingly, Sun has shrewdly invested in Intel systems, and is currently bidding for the products division of Eastman Kodak's Unix software house, Interactive Systems. This California-based company sells one of the most popular versions of the Unix operating systems for Intel-

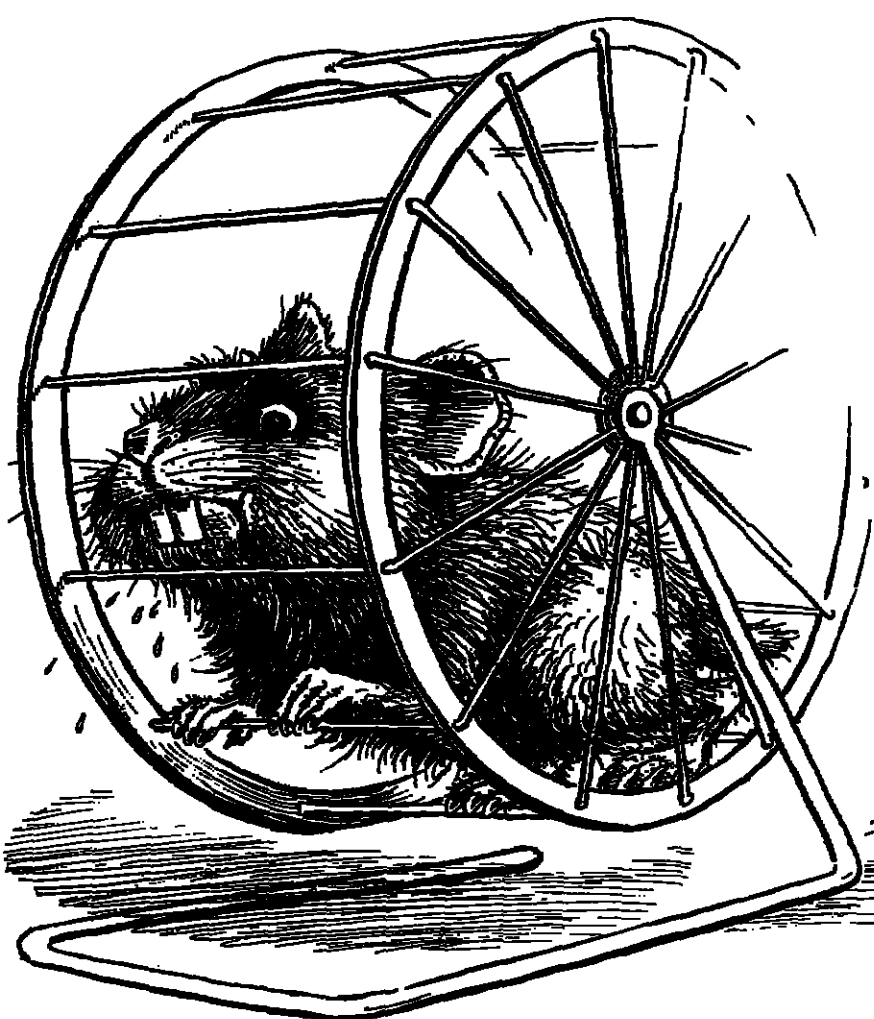
## Worldwide commercial Risc/Unix market - 1990



based machines. Sun has recently consolidated its position in the high-end Unix server market, completing a suite of products that can act as data base and file

servers. It hopes to attract users moving to distributed client server networks, although it faces keen competition.

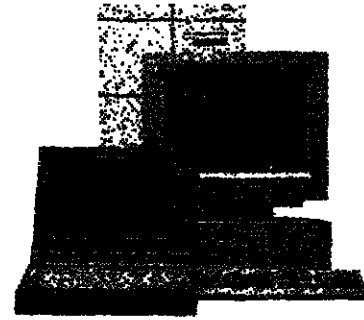
Lindsay Nicolle



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## NETWORKING AND OPEN SYSTEMS 9

## INFORMATION TECHNOLOGY

## Cost benefits seen by governments

GOVERNMENTS, with their huge expenditures on information technology, were among the first to understand the cost benefits that were implicit in open systems and client-server computing.

They built models for vendors and others to follow - the UK government's Gossip OS profile, for example - and their policy of insisting on open systems in public procurement was instrumental in changing attitudes among manufacturers. They realised that valuable government orders would be denied them unless they could meet the contractual requirements.

These orders can be vast in scope. The UK subsidiary of Groupe Bull of France, for example, was last year awarded a £50m contract as prime contractor to computerise the offices of the Inland Revenue. According to Mr. Carol Wyatt, Bull's project manager, the original intention in developing an Inland Revenue "office of the 1990s" was to provide greater resilience within the Revenue's existing computer network, based on dumb terminals linked to mainframes, it left it with restricted means of carrying on with their work if a terminal broke or a line went down.

With the decision to move to open systems communications, however, the project took on a new flavour. By 1985, Bull should have installed 600 Unix servers and 25,000 workstations. It will be, it is thought, the largest Open System Interconnection (OSI) network in the world.

The workstations are special in that they are based on Intel's 286 chip but are "discrete", a security measure which means that information cannot easily be removed from or put into the system. The system runs on the newly established Government Data Network.

Unix, with its background in the universities, is not noted for its security features; the version Bull is providing for the Inland Revenue is "vanilla Unix with some added security" according to Mr. Wyatt. Bull's own "Securis" version was thought to be overkill.

Security was a major consideration in another UK government project, the Ministry of Defence "Chots" (corporate headquarters office technology system) project awarded earlier this month to a consortium of ICL, Hewlett-Packard, BICC,

Cosmos & Lybrand Debit and Data Logic.

The Chots project costs more than the Revenue initiative - it will involve about 10,000 terminals and several hundred Unix servers. The aim is to provide a streamlined communications systems together with personal productivity tools for its users - word-processing, database, email and file sharing of documents and means of access to other systems.

Data Logic was responsible for the design of the system. It had to balance security, control and open processing. Chots started as an open office mail system, the final version will include flow control, routing to prevent unauthorised access, encryption technology and "temporal" personal computers, proof against radio leakage which could be read by receivers outside the building.

Outside government interest in client-server applications is

#### The Ministry of Defence's Chots project will involve 10,000 terminals

growing as companies look at ways of "downgrading" from traditional mainframe applications in favour of personal computers linked by local area networks.

Critbank in the UK, for example, has downgraded many of its cash management and securities applications.

According to Mr. Hermann Rutkowski, Critbank cash management project manager, the advantages of client-server computing are already making themselves felt.

Cash management services are run on behalf of the bank's large corporate customers who use the bank as an intermediary as they move money from account to account to take advantage of interest rate differences and so on.

It is a service which used to generate a lot of telecommunications traffic and sales of paper. The mainframe based system has now been replaced by a series of personal computers using the IBM operating system OS/2 together with Microsoft Windows and connected together in a network by Local Area Network (LAN) Manager networking software.

The bank was a pioneer of this (and indeed many other) computing technologies. Work on

the system started in 1983.

Essentially, the application is to take unstructured news, which may be electronic or paper - and turn them into structured messages easily handled by the bank's back office computer system. The objective of the technological change was to handle the growth in traffic expected as a result of the single European market after 1992.

Mr. Rutkowski experimented with the idea of using artificial intelligence to handle the conversion, but decided against it, the final result would have to be checked by a human operator, so there was limited value in automated handling.

He says that the system gives better control than paper and needs less support than mainframe technology. The cash management department is now in effect self-sufficient in technology. Fewer members of staff are needed and there has been a decline in the number of claims resulting from errors in processing.

Northwest Airlines of the US, which merged with Republic Airlines in 1986, is another pioneer in the use of information technology. It was an early customer for "intelligent" voice communications networks using an AT&T Message 800 to balance traffic loads between reservation centres and provide a 24-hour service.

Now it is applying client-server techniques to its passenger revenue accounting system. Many airlines calculate revenues by a statistical technique depending on a sample of airline tickets (lift coupons) and audit coupons from their travel agents. This is because of the huge daily volume of coupons.

Northwest wanted to audit all its coupons to get accurate revenue figures, check on the efficiency of its agents and get better data on its customers. The system it settled for included workstations, servers, artificial intelligence and image technology, scanning 170,000 coupons into the system daily at 17 a second. Local area and wide area networks are used to connect the host computers, specialised servers and workstations.

The company now claims more accurate revenue figures and improved customer service. The airline has genuinely achieved competitive advantage through innovative use of information technology.

Alan Cane

## OPEN INFORMATION ARCHITECTURE

## Business and IT: closing the gap

NEITHER A Unix box nor a communications interface doth an open system make.

That's the lesson that the world's major corporations are learning fast as they try to break out of their proprietary architectures and introduce widespread open systems.

"In the past, large customers have come to us to find out what open systems mean," explains Mr. Nick Cherric, managing consultant of information technology at Price Waterhouse, London. "Now they are coming to us to ask how to do it. They have enormous amounts of data tied up in proprietary systems and they need to know how to coexist with existing systems, how to retain the value of what they have got, and to get the most out of the new world."

That is not just a matter of introducing open systems in discrete application areas. The world's major users are finding that the real cost benefits and competitive advantages from open systems can be gained only by adopting an open systems philosophy that permeates the whole of the organisation's information architecture.

"For the past 10 years or so we have been driving out open systems standards at the basic technology level," says Mr. Geoff Morris, president and chief executive of X-Open, an international open systems organisation. "We have concentrated on solving the problems of connectivity between systems and the portability of software."

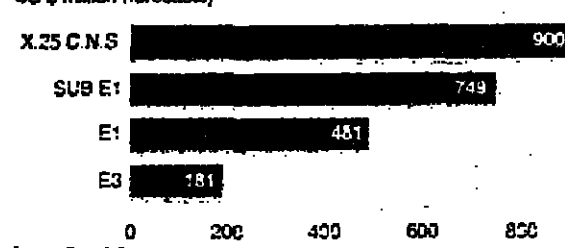
"Now we have to raise the level of activity. We must create an open framework for organisations to build open information architecture that reaches across an enterprise and gives the decision-makers the information they need to do their jobs. At the moment that information is trapped in proprietary systems, so it is difficult to get at and that is restricting business. The focus now is on that information, not the information systems."

The keys to the open architecture are the tools and delivery mechanisms that co-ordinate, manage, deliver and present information to people within an organisation - tools such as relational database management systems, fourth generation languages, query systems and graphical user interfaces.

Information Builders, the US software company, supplies one of those critical toolsets. Its Enterprise Data Access (EDA) range of products allows companies to integrate their information resources no mat-

## European market for WAN equipment - 1995

UC \$ million (forecasts)



Source: Frost & Sullivan

ter what the location, or operating system or the type of database. It can provide Standard Query Language access across 45 different types of database on 35 operating systems, and supports network working protocols from IBM's SNA and DPM's Decnet, to Ethernet and Open Systems Interconnection.

In practice, that amounts to a PC user running a Lotus 1-2-3 spreadsheet and being able to access information stored on one of a company's IBM mainframes, or on a digital machine somewhere else, and

#### "At the moment information that decision-makers need is trapped in proprietary systems"

to merge that data into the Lotus application on his desktop.

"One of the biggest frustrations over the last two decades for customers has been an inability to harness all that enterprise-wide data and deliver it to the information workers who need it," says Mr. Ian Bramley, Information Builders European marketing manager. "It is sometimes locked in operational systems that have been built on successive layers of technology, or hidden in new desk-top and personal computer networks."

That is a situation Shell has been trying to break out of for the past two years. The lack of adequate products on the market forced the company to create its own information architecture to cope with the duplication of data, the inconsistencies across the network and the large amounts of people and processing time it was

database. The rest is in old file formats.

The information warehouse strategy recommends that most of the data needed for regular management information requests is kept at a central location and updated by the source systems at regular intervals. This creates a consistent and easily accessible information resource for information seekers.

The information does not necessarily have to reside in the central location but Mr. Cole believes that "bringing it together at the centre has many advantages because the tools we have there can add significant value to the data." One of these advantages, of course, is that this approach will help IBM sell more central mainframe power.

Some open systems observers fear that this centralised information focus may ultimately create a "data desbin" rather than a warehouse and deny some of the benefits that the decentralised power and performance of an open systems strategy allows.

Nevertheless, the attention and emphasis on the information resource and the tools that provide broad information access are a welcome step for the world's customers and the open systems movement.

"An open information architecture will give business instant access to valuable reservoirs of information around the enterprise," says X-Open's Mr. Morris. "What we need are the open systems standards and the open-minded people who will be able to make this

#### A consistent and easily accessible information resource for information seekers

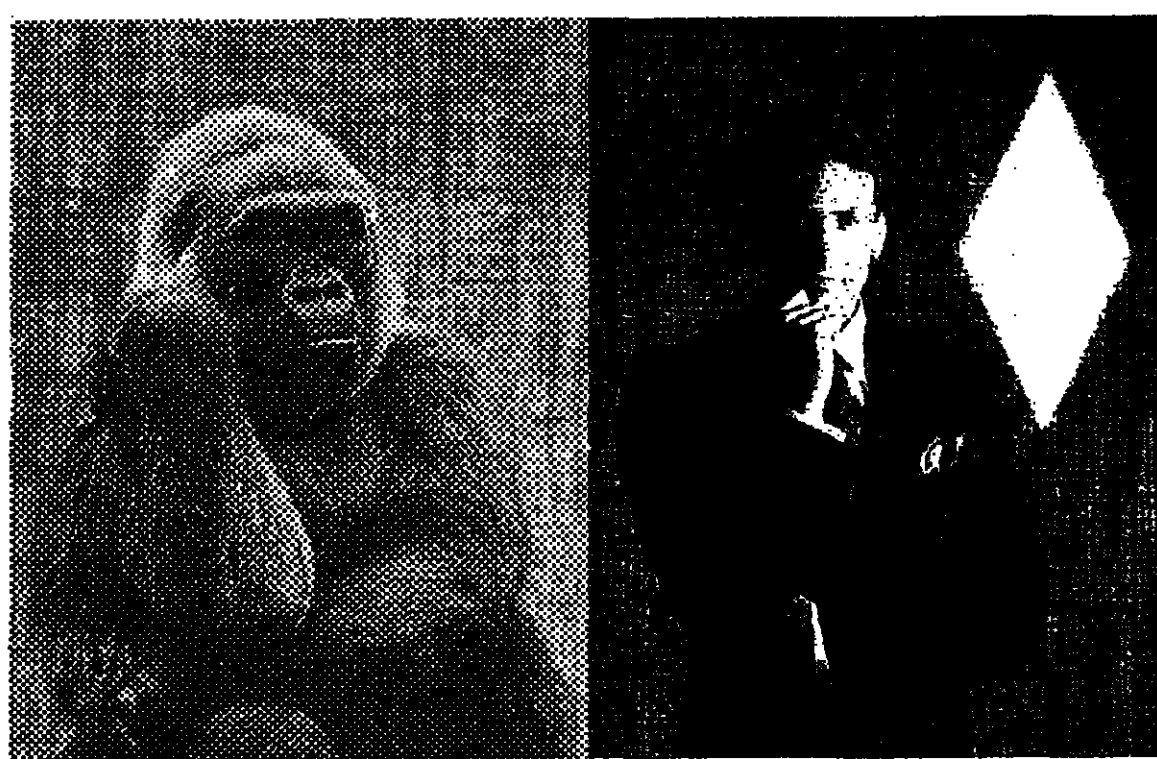
happen. Ultimately, it is this open information architecture that will close the gap between the business and the information technology people. Then we will see the real benefits of the open systems movement.

Paul Tate



Bill Gates, chairman and chief executive of Microsoft, which is fighting tooth and nail to keep its foothold in the personal computer network operating system market

#### The new IBM 4029 Laser Printer Family.



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## NETWORKING AND OPEN SYSTEMS 10

Louise Kehoe on initiatives to unplug a 'software bottleneck'

## Standards battle gets under way

THE VALUE of computer standards first emerged in the personal computer market in the early 1980s when dozens of manufacturers followed International Business Machines' lead, creating IBM-compatible personal computers, or "clones".

Because virtually all PC makers (with the exception of Apple Computer) adopted the same Intel microprocessors and Microsoft operating system as IBM, users were able to choose between dozens of competing suppliers of standard equipment.

A vast array of application programs quickly developed, stimulating computer sales. Computer buyers came to appreciate the advantages of standards through the proliferation of "shrink-wrapped" applications programs and competitive pricing for both hardware and software.

This spawned demands for "open systems" or the creation of standards spanning a much broader spectrum of computer types, centred on various derivatives of AT&T's Unix operating system.

Ironically, however, the standards that have so far emerged in the rest of the computer market are not compatible with the vast installed base of about 90m IBM-compatible PCs.

Three competing industry

initiatives aimed at creating industry standards that will encompass both the PC and higher performance computers have recently been launched:

■ The Ace Initiative, led by Compaq Computer, Digital Equipment, Microsoft and the Santa Cruz Operation, plans to create standards based on two hardware "platforms", the Intel microprocessor-based PC and the MIPS Computer Risc (reduced instruction set computing) architecture. Ace is also backing two operating systems; a new operating system under development at Microsoft, called Windows New Technology, and a Unix-based operating system that will be developed by the Santa Cruz Operation.

■ Sun Microsystems recently launched a new operating system called Solaris, based on Unix, that will run both on Intel-based PCs and on computers built using Sun's Risc microprocessor, called Sparc.

■ IBM, Apple Computer and Motorola recently signed agreements to jointly develop hardware and software that would create a new standard for PCs, workstations and higher performance computers. The alliance will focus on development of technology based on IBM's Risc microprocessor, called Power PC, and a Unix-based operating system derived from IBM's AIX and Apple's AU/X.

Apple Computer's Macintosh graphical user interface will be ported to the new systems.

Both technology and market changes are driving these efforts. The "de facto" standards established by the IBM PC are 10 years old. PC technology has advanced significantly over that period, with the introduction of successive generations of Intel microprocessors and new versions of Microsoft's DOS operating system. The limitations of the DOS operating system have, however, constrained further advances in PC performance.

"It has been very frustrating from an Intel point of view to develop new microprocessor technology that theoretically doubles performance, only to see the real performance improvement degraded by a 10-year-old operating system (MS-DOS)," says Mr Andrew Grove, president of Intel.

He sees the new operating systems unplugging the "software bottleneck" that has prevented computer users taking full advantage of advances in microprocessor technology.

The role of Intel's microprocessors as the "standard" for personal computing is also, however, challenged by the new initiatives. While Intel maintains that its technology will keep pace with developments in Risc microprocessors, the chip company will face

fierce competition in a market that it has dominated for the past decade.

These efforts to establish a new operating system standard also signal a shift in the role of the "personal computer". Individual PC users don't need all the features of a multi-user, multi-tasking operating system, such as Sun's Solaris or Microsoft's NT. For many users, the power of an Intel 486 microprocessor is more than adequate.

When the PC is linked to a network to become a gateway to corporate data bases, however, the picture changes. About 20m PCs are currently connected to networks and the number is expected to double over the next 12 months.

The open systems trend has also had an important influence on the PC market, raising the issue of how to more closely integrate PCs with computers that run the Unix operating system.

Ace, Sun and IBM-Apple are now set to do battle in the marketplace, with each attempting to establish dominant standards for the next generation of personal computing by gathering the support of as many other industry participants as possible.

The situation is reminiscent of the "Unix wars" of the late 1980s when an industry schism resulted from the formation of

the Open Software Foundation and Unix International.

The PC standards battle is, however, just beginning to get under way as participants take up opposing positions. To date, none of the computer products promised by the protagonists have been brought to market and it will probably be late in 1992 when the first such products emerge.

For computer users, the PC standards battle will no doubt prove as confusing as the Unix wars. Users will have to pick through a smokescreen of marketing hyperbole to discern which approach will ultimately dominate the market.

In this situation, however, users may simply choose to defer any decision on which direction to take on future PC standards, sticking instead to the current PC standards which are adequately meeting their needs.

Unsettled the established Intel-Microsoft PC standard will not be easy, despite the fact that the computer manufacturers promise to protect current investments in PC hardware and software by ensuring compatibility with new types of systems.

The unsuccessful attempts by Microsoft and IBM to establish OS/2 as a new PC operating system, demonstrate the inertia that an installed base of millions of computers can create.

Today's PC standards are therefore expected to remain dominant for several years and only in the mid to late 1990s will the PC sector finally be drawn into the broader scope of interoperable open systems.

## BOOKS

## Guide through the maze

OPEN SYSTEMS promise simplicity but generate complexity. The fault lies not with the concept but with the computer industry.

There is a confusion of offerings from computer system suppliers, each claiming to be open and, indeed, more open than its competitors.

Add in the profusion of organisations each fighting its own corner in a busy marketplace - X/Open, Uniform, 88 Open, Unix International and so on - and the need for a simple guide to the open systems maze is clear.

Pamela Gray's qualifications to write such a volume are indisputable. Active in open systems for many years, she was president of the international Unix user group from 1986 to 1988 and is now head of a company which aims to supply information about open systems to subscriber organisations.

There are at least two ways to approach an explanatory text about open systems. One is essentially technical, the computing equivalent of outlining why it is easier to make international telephone calls if there are global telecommunications standards or blow-dry your hair abroad if electrical power supplies are the same voltage and sockets the same shape as those at home.

The other is philosophical; in essence an approach which sets out to explain how world problems could be better tackled if telecommunications systems or electrical supplies were standardised worldwide.

While it has its fair share of technical explanation - there are five chunky appendices dealing with issues such as data handling, security and systems administration - Pamela Gray's book is very much of the latter variety.

It starts from the point of view that the establishment of

are chapters on how to choose a supplier, for example, and among the appendices there is a list of questions to test the supplier's openness. "Is the supplier flexible or wedded to pure dogma?" it asks.

The list was, in fact, prepared by the US computer manufacturer Data General which is associated with NCC Blackwell in publishing Mr Hugo's book. He notes: "Since it is provided by an interested party, it is open to accusations of bias; test it on other suppliers to see if they cry foul - and where and why."

One of Mr Hugo's advantages in putting together such a book is his acute scepticism. Although an advocate of open systems, he is by no means an unthinking believer, pointing out that although open systems are usually presented as a low cost option in data processing, in some sectors they may prove more expensive than solutions based on proprietary technology. "In the long run, however, it is obvious that open systems will be more cost effective. The guarantee of freedom for competition that open systems bring with them in itself almost guarantees that."

He looks at the pitfalls inherent in "standards", pointing out that a particular standard for computer communication defined little more than the number of pins in an electrical interface and their position in a plug or socket. "The scope of the standard does not include a definition of the type of information that each of the lines should carry. One result of this was that a couple of suppliers created a niche market in little black boxes that identified exactly what was going down each wire. Along the way, however, a lot of users became sadly disillusioned with standards."

Many people are going to remain disillusioned with standards and with the promises of the open systems movement unless the industry works to make the whole area a lot simpler to follow.

The impression, sadly, at too many open systems events these days is of an industry talking to itself, shut off from real life. "A trip through the relevant standards organisations is unfortunately likely to produce glazed eyes and leave the reader baffled and bewildered rather than better informed," Mr Hugo writes. Dr Gray writes of her "frustration over the last few years with the scarcity of materials which explain to those who need to make strategic decisions in this area what the relevant issues are and why they are so important."

Until open systems live up to their promise of simplicity, there will be a powerful need for books such as these.

Open Systems. A business strategy for the 1990s. Pamela A. Gray. McGraw-Hill 1991. Practical Open Systems. A guide for managers. Ian Hugo NCC Blackwell 1991.

Alan Cane

## Such overruns have served to sow seeds of doubt

industry-wide standards (which is really all that open systems is about) is a key to solving many of the problems affecting the industry. "Information technology (IT)," she writes, "should be made easy to use while at the same time designed in such a way as to allow innovation and competitiveness among suppliers to proceed."

"We contend that the only way to do this is through the adoption of international, widely-used, consensus standards for IT systems, supported by the entire computer industry and set in such a way as to reflect the real needs and priorities of the marketplace."

Many of these problems are already well known and their solution has not been especially connected with the establishment of open systems. They include, for example, the problem that many, perhaps a majority, of computer projects consistently overrun both on time and cost. Such overruns have served to sow seeds of doubt about the effectiveness of data processing management.

Then there is the application backlog, the fact that in many data centres the time from a request for a new piece of applications software to its delivery can be up to two years - by which time the reason commissioning the software may have evaporated.

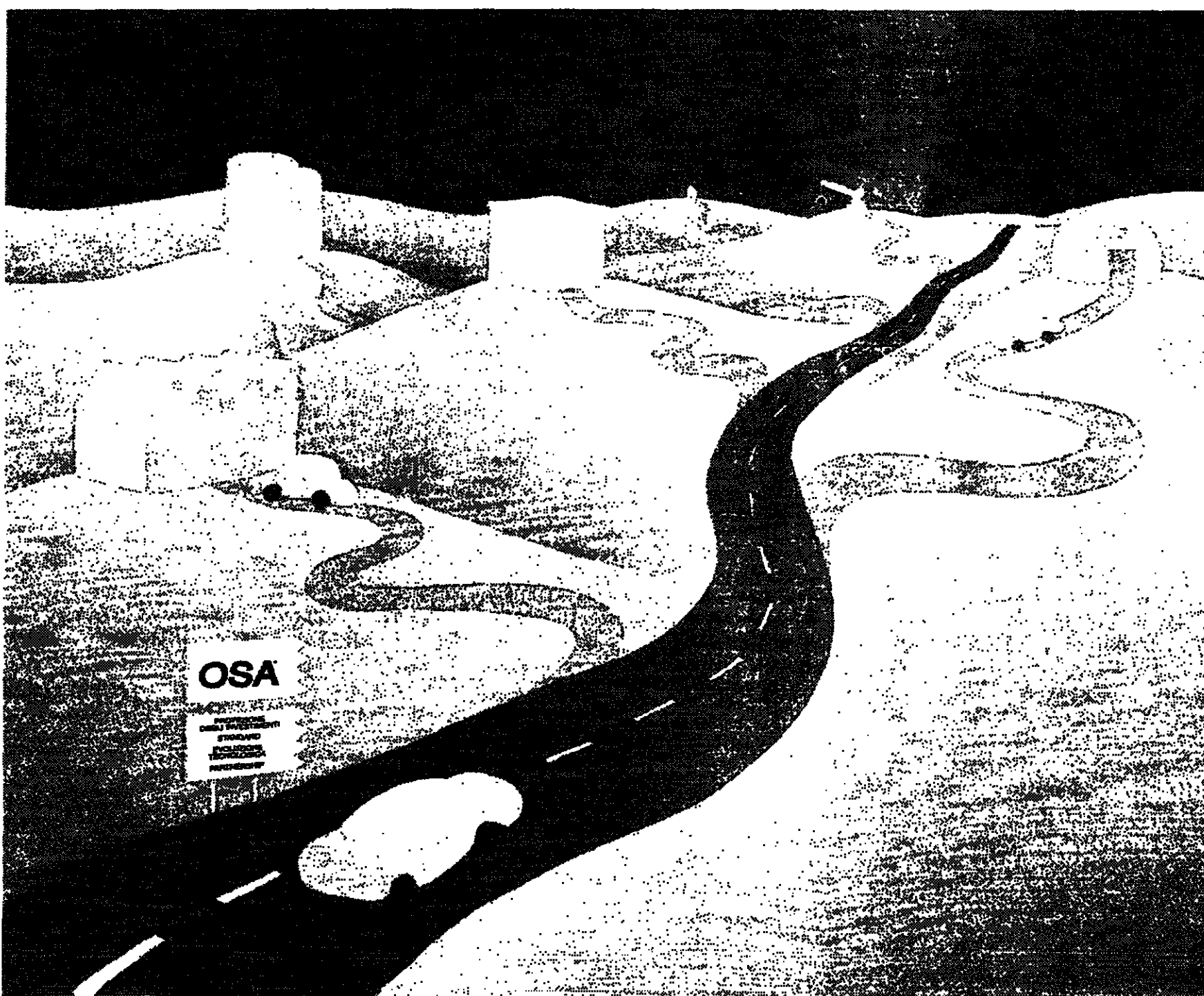
Finally, there is the worldwide shortage of skilled computer specialists, a shortage that is unlikely to improve in the future.

Pamela Gray notes that every organisation is seeking to make its people more productive, to reduce learning times and to use staff from outside organisations without the need for retraining. They are also trying to control and reduce the time taken to develop new systems and provide a better service for their customers.

She concludes that to achieve better and more efficient use of IT and IT people some of the variation that exists in the computer industry must be reduced.

Ian Hugo's book, while no less comprehensive than Dr Gray's, is very much a practical guide for managers on how to choose open systems. There

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## NETWORKING AND OPEN SYSTEMS 11

Peter Judge investigates a world akin to that of politics

## Those who set standards hope to call the tunes

THE MAIN difference between the world of politics and the world of standards is that in the world of standards, the standards are set by the standards makers.

Standards have become the most important issue in IT. They are fundamental to open systems, so whoever sets them, has decided directly to influence the standards that concern them, and users are forming groups to ensure their needs are met.

The United Nations for all standards is the International Organization for Standardization (ISO) but, in IT, the International Consultative Committee for Telephony and Telecommunications (CCITT) is almost as important.

ISO is a forum of standards bodies from around 80 nations. It is a "non-treaty" body of the UN proper: a voice of the industry, not of governments. It publishes standards for everything, including IT: suppliers are free to adopt them or not. Its most well-known IT work is the OSI seven-layer model, begun in 1978.

CCITT is the forum for the public telephone and telegraph (PTT) companies worldwide. In the UK and the US, privatised telephone companies have been replaced by government departments. CCITT specialises in networking and makes "recommendations" which are often treated as standards by other bodies.

CCITT uses ISO's OSI reference model for its work. ISO in turn adopted the CCITT's X.25 wide area network, X.400 electronic mail and other work as standards.

The ISO-CCITT alliance is longstanding, as is ISO's direct link with the Institute of Electrical and Electronic Engineers (IEEE). The IEEE's work includes the local area network standards Ethernet and token ring, and the application portability interface, Posix. Between them, ISO, CCITT and the IEEE have settled the most important basic open systems standards.

But users and suppliers demand more than basic standards: new areas emerge continually, and the industry needs advice on how to implement the standards. For the most part, this comes from those concerned, working directly in consortia.

And that is where the conflict comes. Rival consortia present rival standards, and the industry needs advice on how to implement the standards. For the most part, this comes from those concerned, working directly in consortia.

**The industry comes close to spilling blood on portable software**

served first. Standards created in this way, or by single suppliers, are called *de facto*. The most important *de facto* standards in the emerging open systems field are variations on the Unix product from AT&T Unix System Laboratories.

The spread of open systems in industry began with industry-specific bodies, such as the Open Group, which started defining open systems for manufacturing in 1980, to encourage suppliers to meet the needs of large suppliers including General Motors.

Now the Government OSI Profiles (UK and US GOSP), and the European Procurement Handbook for Open Systems (Ephos) are far more important. With billions of IT spending, governments can define the predominant implementations of standards.

Gospis simply take existing OSI standards and refine them to make OSI "profiles". Profiles select from the options within a set of standards. Without profiles, suppliers can make OSI products which are not compatible with each other; when products meet a particular profile, they probably will work together.

MAP is still looked after by a world federation of MAP/TOPI User Groups. The UK GOSP is defined by the CCTA and the US version by the National Institute of Standards and Technology (NIST). ISO has recognised the importance of profiles, setting up a Special Group on Functional Standards (SGFS), whose job is to publish the agreed output of OSI workshops in Europe, Asia and America.

Other groups have appeared, working to make particular standards usable. The Network Management Forum has prompted faster ISO work on network management, while the ODA Consortium hopes to get electronic document standards such as Open Document Architecture (ODA) into the market quicker. The X.400 API Association, aims to help suppliers make compatible electronic mail products according to the X.400 recommendations.

But all these deal with communications only. The industry comes closest to spilling blood on portable software. Versions of Unix are available from several suppliers, and at least two main groups are fashioning versions which they hope to establish as market leader.

Unix International is out ahead at the moment, having established the Unix version from AT&T Unix System Laboratories (USL) in the market. The Open Software Foundation's version, OSF/1, is still not selling in volume to users, but it is included in the Digital/Microsoft/Compaq ACE initiative and the IBM/Apple joint venture.

Meanwhile, OSF has established the Motif user interface, and had a good reception for its Distributed Computing Environment (DCE). DCE is actually included in the rival Atlas product from UL.

UI and OSF are not the same kind of body: UI gathers specifications from hardware suppliers to tell USL what products to make; OSF actually makes products, which it then sells to its sponsors, IBM, DEC, Hewlett-Packard and others. The two are actually quite close together, as UI's use of DCE

shows. Both of them comply with international standards, including POSIX and OSI.

The body which aims to pull the industry together is X/Open. Set up by suppliers, X/Open's goal is to bring together enough standards to cover all the basic functions of an open system, including POSIX and OSI. X/Open calls this a common application environment (CAE) and it includes international standards, and *de facto* standards with wide enough support. X/Open canvasses users, in its Xtra market research, to determine what standards are required, and keeps the balance between supplier groups, such as OSF and UI.

But X/Open could face competition, from the latest in a line of militant groups of users. Standards and Open Systems (SOS), whose members include Dupont, Eastman Kodak, McDonnell Douglas and American Airlines, formed late this summer. It apparently wants to adopt a different CAE, being developed at NIST, called the application portability profile (APP).

The crucial fact is that SOS, as users, can be biased towards suppliers. SOS is also strongly in favour of many OSF standards, and could try to include these in a partisan CAE.

It is too early to tell if there will be conflict here: SOS members are mainly drawn from an earlier pressure group called the User Alliance for Open Systems, which has gone quiet since its 1990 launch.

Meanwhile, the progress of the Object Management Group (OMG) is a ray of hope. Object orientation is a key technology for a new kind of distributed computing which has yet to be delivered to the market.

In the normal way, suppliers would be at each other's throats trying to gain market share for their own ideas. But OMG appears to have persuaded the industry to agree to one standard, for the Object Request Broker, the first piece of technology for this new paradigm.

Peter Judge is the author of *Standards Makers and their Standards*, published by Technology Appraisals.

## SECURITY SOFTWARE

## Spies and viruses lurking in your friendly computer

IT ALMOST seems a contradiction in terms to talk about security software for networked personal computers. After all, the PC was designed to be friendly, intuitive and inviting. How can you even talk about the PC in the same breath as products designed to lock some people out and restrict access to others?

Passwords, encryption, keyboard-locking and dumb terminals are all still considered by many PC users to be part of the foreign world of the mini-computer and mainframe computer. But if PCs are to continue to penetrate the larger business computing arena at its current rate of growth, personal computer users are going to have to start thinking a great deal more about security issues.

And particularly as PCs gain further ground in "mission-critical" applications - and are offered with ever-improving connections to large PC Luns, minis and mainframes - corporate buyers must feel confident that they can implement appropriate security measures on their systems.

According to Mr Mike Tait, managing director of High Wycombe-based PC security software specialists Fifth Generation Systems, the problem is that users now have lots of power on their desks without the security procedures which were built-in to traditional mini and mainframe systems from the ground up. With increasing numbers of PCs becoming part of a company-wide network, those procedures are having to be relearned.

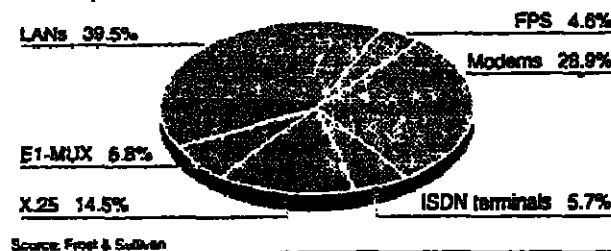
"It used to be that IT managers had control of security," explains Mr Tait, who was a vice-president and general manager at computer giant Univision before joining Fifth Generation. "But the advent of the PC meant lost control - because departmental heads were buying individual PCs. It became more like an advanced calculator. But with the PCs available these days, users now virtually have mainframe power on their desks and PCs have sophisticated integration and connecting capabilities."

Part of the problem, however, is that even with the best PC network security software in the world, it is useless if it is not used properly. There is no point, for example, in implementing high-level security measures to protect sensitive financial data on the company minicomputer if somebody leaves a copy of that data on a departmental network of PCs that do not provide the same levels of security.

For that reason, PC manufacturers are increasingly offering "discuss workstations" for connection to personal computer networks. These allow users to run all their traditional PC software over the network - and perhaps have a hard disc for local storage - but do not offer floppy discs, so that the only way data can be physically added to or removed from the network is by the network administrator. Anyone else can

## European data communications equipment

Value shipments forecast - 1995



Source: Frost &amp; Sullivan

"The PC is now a serious base for company information processing. The spend on PC technology now forms the largest proportion of corporate expenditure on IT systems. The majority of a company's critical information is now stored on PCs - yet typically, security has been non-existent or low, at best. This renders companies open to industrial espionage, computer virus infection and wasted time when something does go wrong."

**There is no point in implementing security measures to protect sensitive financial data if somebody leaves a copy on PCs that do not provide the same levels of security**

last 10 years into the fabric of companies - into the actual running of business," says Mr Manz. "In fact, the real pay-off will come from using information technology not just to automate tasks, but to redesign jobs, processes, management systems and organisations themselves: to use technology to design the way we work."

This applies quite aptly to the question of data security and the way that network personal computer users tend to ignore it. While it is true that PC networking and E-mail products from the major software and systems houses tend to offer reasonable security provisions, there are some things inherent in the very nature of the PCs which militate against them being as secure as the minis or mainframe systems with which they have to work in large companies.

To start with, the PC is so

simple to use that you tend not to think about the fact that you are using a computer. Yes, it is true that when you start up a PC that uses an electronic mail package, for example, you have to type in an ID and password in order to get into the mail system. But the confidence that the PC offers even to the novice user may make him or her that much more careless about the way he creates an ID or password.

Many users simply assign their own first name as their ID and then have a password that is easy to remember. The problem is that, in many cases, it takes very little brainpower to figure out someone's ID and password.

Mr Tait, however, says that password systems are more devices for user privacy than real corporate data security. He suggests that real network data security is achieved by regularly backing up data, limiting access to the PC itself, having provisions for data encryption (so that data is readable only on your network - if you put it on a floppy disc and take it home without encrypting it first, it would be unreadable), using virus protection software and adopting proper corporate data security procedures.

It is even worth considering drafting employment contracts so that employees are responsible for the data they use - and are contractually prevented from taking data away with them when they leave the company and that they are required to make known all security passwords, he says.

"An integral part of the employment contract should be provisions for proper protection of the company's information," he concludes. "It should specify what you can and can't do with discs brought in from outside the company and lay down what happens where there is no master keyholder to all passwords - so that employees have to hand over their passwords along with the company Amex card, company car and office door keys."

Geoff Wheelwright

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## NETWORKING AND OPEN SYSTEMS 12

With their stronghold under siege, what do the manufacturers have on offer?

## The mainframe loses its might

THIS YEAR the greatest proprietary stronghold of the computer business came under siege. The mainframe sector now faces the very real prospect of open systems becoming a reality.

With falling demand and shrinking margins across their proprietary mainframe markets, the world's mainframe manufacturers are now desperately trying to exceed each other in "open" moves with product announcements and statements of direction.

Over the last few months IBM has said it will run its own Unix version called AIX on its 9000 range of machines,

systems," says Mr Gavin Roach, IT infrastructure marketing manager at IBM UK.

"The problems have changed. It used to be a plea for more processing power, now they are saying: 'help us to integrate our systems, and manage our data,'" he explains.

ICL also found customers

for the major customers. What they are trying to do is to move the good things they have forward, and to get greater supplier independence."

It looks as if it may be a rough ride. Mainframe systems have increasingly supported open systems communications standards over the past 10 years. The hot issue now is application portability and inter-operability across different systems which require more complex and pervasive changes.

The open systems solutions being offered by the mainframe makers on today's market fall into two different, and potentially competing, categories.

First, like IBM's strategy with its mainframe version of AIX, a separate open systems operating system is being offered based on either AT&T's Unix or the Open Software Foundation's OS/2. IBM compatible mainframe supplier Amdahl has had a mainframe based Unix system available for many years called UTS which is now on its third major release. But while Amdahl can cite hundreds of UTS licences around the world, it is difficult to quantify precisely how much the product is being used and for

what purposes.

None of the mainframe suppliers expects to make a major killing out of this approach. "In many aspects of large systems effectiveness, comparing Unix with our MVS is chalk and cheese," says IBM's Mr Roach. "We expect most interest in the technical and scientific fields where Unix is more common, but we

of its Network Application Support Program and IBM intends making similar adaptations to MVS. Both are committed to creating an open operating system that supports the US-developed Posix standard.

ICL has already gone one step further and in May this year became the world's first company to be awarded a

thousands of businesses around the world which depend on their existing proprietary systems. The open proprietary approach offers the best of both worlds."

IBM's Mr Roach explains how this will work with the open version of MVS. "We can see there will be a lot of benefits of being able to buy Posix or X/Open compliant applications that run on many different machines," he says. "On the mainframe itself, MVS applications will not be affected but they will be able to access the Posix applications. And with some changes, the Posix applications will be able to access the MVS tasks."

Since there are very few open systems applications available at the mainframe level, and much of a corporation's information resource is tied to the formats and software of its traditional mainframe systems, a gradual transition is the most that companies can hope for at this stage. Besides, most of these open proprietary products will not be available on the market until next year at least.

But does this strategy represent the past trying to catch up with the present, or is it a real solution for the future? Research predicts that

source of proprietary computing power.

"Eventually, we will be able to run open MVS across machines of many different sizes over ever-greater distances and so the mainframe itself is likely to become more an open management information switch or data server," he says.

While the large systems' open systems option that emerged this year may not spell the end of mainframes themselves, it may well extinguish the traditional mainframe culture.

Customer needs are forcing the enclaves of old world computing to be broken apart

But does this strategy — of a gradual transition to an open proprietary market — represent the past trying to catch up with the present, or is it a real solution for the future?

"We expect a number of our customers will choose this option above the Unix approach because it means protection of their existing investments," he adds.

The most dramatic result of this process is that the role of the mainframe may change as it becomes less of a primary

and the mighty mainframe, once the epitome of computing prowess, looks set to be downgraded to just another source of information, processing power and applications on the open systems network.

Paul Tate

IBM had little choice. Most of the 29 requirements passed to it by the powerful share customer group last year were about open systems

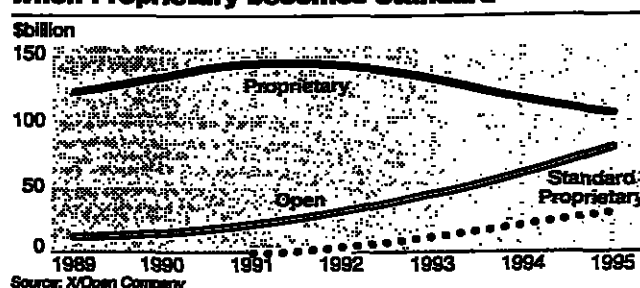
and offered more details on its plans to create an open systems version of its MVS operating system: Digital, which has a Unix version called Ultrix, has continued to promote its intentions to open up its own VMS operating system; and Britain's ICL has launched a new version of its proprietary mainframe product called Open VME.

More open mainframe announcements are likely to be on the way from other manufacturers, from Unisys to Bull. IBM had little choice. Out of the 29 requirements passed to IBM by its powerful share customer group last year, most of them were about open

pushing for an open option on its mainframes, such as British Gas which announced in September that it is to implement a new open systems IT strategy built on ICL mainframe platforms.

"British Gas saw openness as a long-term strategy," says Mr David Slavid, ICL's business manager of corporate systems. "It wants a corporate data centre that gets the most out of its data and network." He stresses that this is not a short-term issue. "You don't suddenly wave a magic wand and make your millions of lines of code portable. There is no instant fix. The next five years will be the transition era

When Proprietary becomes Standard



Source: X/Open Company

don't expect many companies will change to this platform in other areas. We will be able to provide the benefits through an open MVS."

That is the key to the second approach — an open version of a company's existing proprietary operating system. Digital is taking this route with its plans to open up its VMS operating system as part

brand by the international open systems organisation X/Open for a mainframe operating system.

"The general trend in mainframes is now for 'open proprietary' operating systems," says Mr Slavid. "This is a gradual move by suppliers to recognise that they must change, but they also know that there are still

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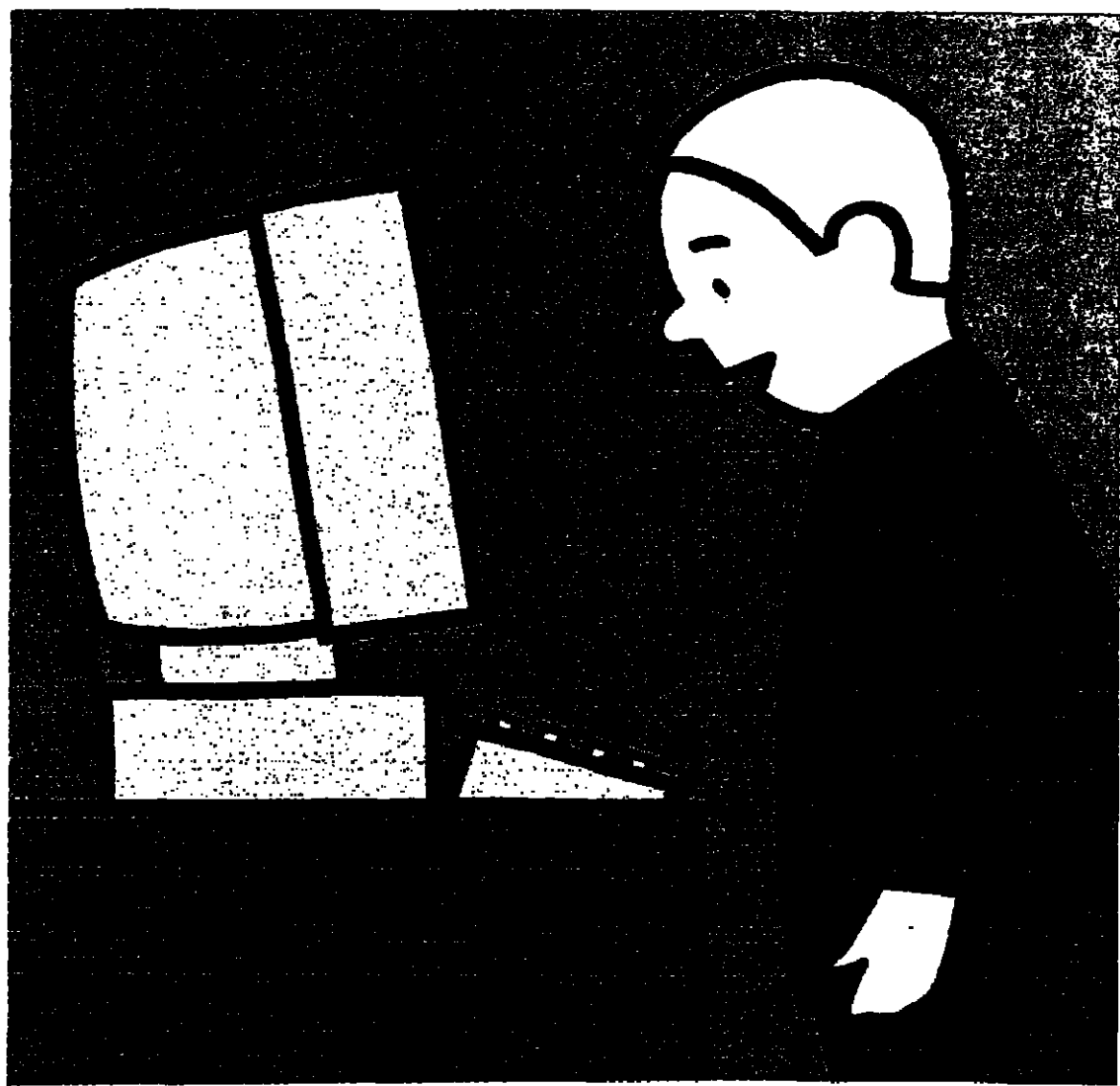
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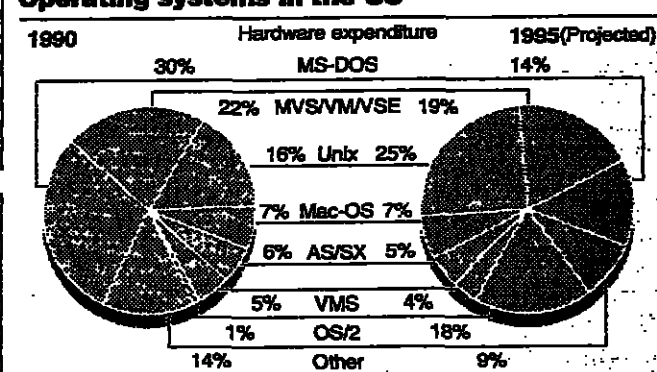


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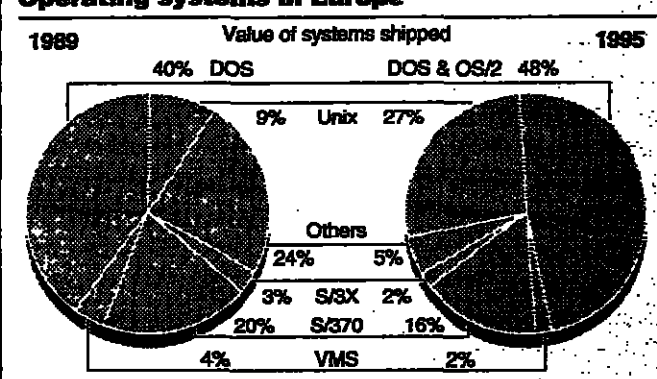
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